

# MAIN CAMPUS

#### Caguas

39-40 B Street West Industrial Park Caguas, Puerto Rico 00725

P.O. Box 6118 Caguas, Puerto Rico 00726 787-744-1060 / 787-743-0484 FAX: 787-744-1035 E-mail: caguas@mechtech.edu

# BRANCH CAMPUSE

#### Bayamón

Road 167 Km 18.9 Bo. Pájaros Bayamón, Puerto Rico 00960

P.O. Box 959 Bayamón, Puerto Rico 00960 787-797-1144 / 787-797-1166 FAX: 787-279-1188 E-mail: bayamon@mechtech.edu

# Mayagüez

William Bernard Street Building #43 and #33 Guanajibo Industrial Park Mayagüez, Puerto Rico 00680

P.O. Box 3121 Mayagüez, Puerto Rico 00681 787-834-5225 FAX: 787-832-8484 E-mail: mayaguez@mechtech.edu

#### Vega Baja

Road 155 Km 65.7 Bo. Pugnado Afuera Golpe Avisa Sector Vega Baja, Puerto Rico 00694

P. O. Box 4118 Vega Baja, Puerto Rico 00694 787-807-0575 / 787-807-0711 FAX: 787-858-1540 E-mail: vegabaja@mechtech.edu

#### **Ponce**

Road PR No. 2 Km 220.1 El Tuque Recreational Complex Ponce, Puerto Rico 00728 787-709-4440 / 787-709-4441 FAX: 787-709-4199 E-mail: ponce@mechtech.edu

#### Orlando, Florida

Mech-Tech Institute 8620 South Orange Blossom Trail Orlando, Florida 32809 407-888-1111 FAX: 407-888-1112

# Website www.mechtech.edu

# **Auxiliary Classroom**

# Mayagüez

William Bernard Street Building #33 Guanajibo Industrial Park Mayagüez, Puerto rico 00680 787-831-3755 FAX: 787-805-0030

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#### MESSAGE FROM THE PRESIDENT

If you, student, have ever dreamed of working in an occupational field with a great future, I invite you to study at Mech Tech.

Since 1984 our Institution has maintained a clear sense of its mission by providing young people and adults with a technical education of excellence in occupations with a high industrial market demand.

On July 2, 1984, the Institution obtained is Operating License from the Puerto Rico Department of Education (General Education Council). On August 18, 1990, Mech-Tech obtained its initial accreditation by the ACCET Accrediting Commission.

On October 2009, Mech-Tech College started its Health Division where Associate Degrees are offered: Dental Assisting with Expanded Functions, Computer Programming, Office Administration, Management and a Diploma in Practical Nursing.

Our Branch Campus as Mech-Tech Institute in Orlando, Florida commenced operations in April of 2012.

Our curricular guidelines have been designed and reviewed by technical personnel from the public and private sectors, to keep up with actual industry needs.

Our faculty is composed of high-qualified technicians in the occupational fields of metals (Tool and Die Maker), mechanics, electricity, refrigeration and electronics. The academic professors are specialists in the subject matters they teach.

Our sport is Drag Racing, because this sport applies knowledge acquired in all of the programs we offer. Mech-Tech's achievements are known the world over, since our drag racing team has been a winning team nationally and internationally, especially with four-piston and two-rotor vehicles. Champions such as Rafaelito, Eddie Colón, William and Isaías Rojas; among others, are part of the success that Puerto Rico has achieved in these races at a national level; all of them Mech-Tech graduates.

The diploma, which our students obtain, not only enables them to work as technicians, but also prepares them to become intelligent consumers with a positive view of life.

It is a true challenge to study at Mech Tech College and I invite you to join the hundreds of youth and adults who have already defined their goals, by graduating and entering the work force after being hired by industries of great prestige.

We'll be expecting you!

£dwin J. Colón-Cosme

President

#### 1.0 HISTORY OF THE INSTITUTION

Mech Tech College is a Higher Education and Technical Institution which mission is to educate and re-educate youths and adults with the competencies necessary to compete for employment opportunities that can emerge in these fields. It received its authorizing operating license in July 1984 and commenced operations in September 1984 in the City of Caguas, Puerto Rico with a group of one hundred and two students in a basic and general education course.

On March 1985, three (3) technical courses began: Electromechanics, Automatic Transmissions and Automotive Mechanics. The following courses were added afterwards: Diesel Mechanics, Automotive Mechanics with Computerized Fuel Injection, Automotive Electromechanics, Automotive Technician, Automotive Mechanics Technician, Industrial Electricity, Industrial Electromechanics, Refrigeration & Air Conditioning, Industrial Electronics, General Mechanics (Turnery) and Tool & Die Maker.

The Institution was founded and developed by two technical education visionaries, who are: Mr. José Colón-Merced, a Vocational and Technical Education Specialist and Mr. Edwin J. Colón-Cosme, a Computer Technology Specialist. At the present time Mr. Edwin Colón holds 100% of the Institution's stocks, which makes him its only owner.

Thanks to the administrative capability and dedication of Mr. Edwin J. Colón, the Institution has managed to expand its facilities to the Cities of Mayagüez, Bayamón and Vega Baja; and in 2009 a new branch in Ponce; this Branch began operations with the Technology in Racing Mechanics programs; the Mayagüez and Bayamón Branch offer all Technical Programs; and the Vega Baja Branch and Caguas Main Campus offer Technical programs and Associate Degree programs. The list with all the programs of study of our Institution is included under Section 2.1 of this Catalog.

On December 2000, The Puerto Rico Council of Higher Education approved the Technology in Marine Mechanics and Technology in Industrial Welding Programs which were approved by ACCET in July and September 2002 respectively. The Technology in Systems Integration (Networks) Program was approved in January 2002 and by ACCET in July 2002 and Automotive Mechanics (48 credits/960 hours) was approved by the Council in June 2002 and by ACCET in September 2002.

The following programs were added to our already extensive list: Automatic Transmissions, approved by ACCET in November 2003; Technology in Automobile Collision Repair, approved by the General Council in June 2003 and by ACCET in October 2003; Microsoft® Computer Systems Specialist, approved by the General Council in May 2005 and by ACCET in June 2005; Motorcycles Repair and Maintenance, approved by the General Council in November 2006 and by ACCET in March 2007; Technology in Racing Mechanics, approved by the General Council in June 2007 and by ACCET in January 2007.

The Puerto Rico Council on Higher Education, in its July 22, 2002 ordinary meeting, decided to grant an Authorization License to offer Programs at an Associate Degree level in the Main Campus in Caguas. The Programs are: Associate Degree in Electrical Technology, Associate Degree in Automotive Mechanical Technology and Associate Degree in Tool and Die Maker Technology, making our Institution the first one to offer an Associate Degree in this field; these Associate Degrees were approved by ACCET in January 2003. On June 22, 2007, the following were approved for our Main Campus in Caguas: Associate Degree in Industrial Electromechanical Technology and Associate Degree in Biomedical Equipment Repair; these two Associate Degrees were approved by ACCET on September 2007.

In February 2004, our Institution expanded its facilities to the City of Vega Baja. This Branch began as the only one offering the Technology in Automobile Collision Repair Program. The Associate Degrees for this Branch were approved by the Higher Education Council in February 2008 and by ACCET in May 2008. These Associate Degrees are: Associate Degree in Industrial Electromechanical Technology, Associate Degree in Biomedical Equipment Repair, Associate Degree in Technology of Electricity, Associate Degree in Automotive Mechanical Technology and Associate Degree in Tool and Die Maker.

In March 2007, the Caguas Institute of Mechanical Technology (Mech Tech) underwent a change in ownership without a change in control to Mech Tech College. In 2009, the Mayagüez Branch was relocated to the Guanajibo Industrial Park in a 33,000 square feet building.

Mech-Tech College has been the main sponsor for the Drag Racing sport in Puerto Rico, becoming as well the only sponsor of the Mech-Tech College and Race Track in Ponce, Puerto Rico on 2008. In August 10, 2009 Mech-Tech College enrolled its first class in its new Branch located within the facilities of the aforementioned race track. This new location was successfully accredited by the ACCET and authorized by the Puerto Rico General Education Council.

The branch campus in Orlando, Florida offers diploma level programs of study and is licensed by the Florida Commission for Independent Education, License #4363 and was added under Mech-Tech's institutional ACCET accreditation. Additional information regarding this institution may be obtained by contacting the Commission for Independent Education, 325 West Gaines Street, Suite 1414, Tallahassee, Florida, 32399-0400, toll-free (888) 224-6684.

In the Year 2012, the following programs were added to our list of academic offerings: Technology in Technology in Alarm, Sound, and Security Systems (not currently licensed in Florida) and Associate Degree in Nursing. Also this year, a change of name was approved by the CEPR and ACCET for Associate Degree in Electrical Technology which changed to Associate Degree in Electrical Engineering and the Associate Degree in Tool and Die Maker which changed to Associate Degree in Mechanical Engineering.

#### 1.1 PHILOSOPHY

MTC/MTI is an Educational Institution, which integrates scientific and technological knowledge produced by scientific research with academic plans and curricula from various academic programs that it offers. The academic offerings are designed in response to social, economic and cultural changes in a dynamic and productive way, and seek to incorporate new concepts and technical advances in different occupations, careers and academic programs.

MTC/MTI fosters a flexible Admissions Policy based on the values of freedom, responsibility, fulfillment of one's duty, work dignity and conscience rectitude.

In its services, academic offerings, administrative work and job opportunities, MTC/MTI complies with non-discrimination policies for reasons of race, color, gender, birth, national origin, social status, political or religious ideology, age or physical disability.

Graduates of our academic programs can directly enter the job market and successfully perform in the industry, in various positions.

#### 1.2. MISSION

Mech Tech College is a higher education and technical training Institution whose mission is to train and re-train youths and adults with the necessary practical and theoretical competencies in professions that will prepare them to compete for employment opportunities that can emerge in these fields and maintain them.

Students will be integrally formed with a capacity to critically address the technological, social, ethical, cultural, and economic challenges of a fast-growing and changing society in the human aspect but also intellectually, achieved through our innovative curricula.

#### 1.3 PURPOSE OF THE INSTITUTION

The goal of MTC/MTI is to achieve training of young people and adults in the areas of manufacturing and services by means of technical training courses, such as: Automotive Mechanics, Electricity, Refrigeration, Industrial Electromechanics, Electronics and Metals; and training courses aiming to an Associate Degree in Technology in Automotive Mechanics, Technology in Electrical Engineering, Technology in Mechanical Engineering. The Health Division also offers an Associate Degree in Dental Assisting with Expanded Functions. The integration of this labor force will allow them greater participation in the production of services, which are generated by the economic system and will facilitate human-condition improvement, becoming productive individuals useful to society.

#### **1.3.1** Goals

- To train young people and adults with the technical knowledge and skills necessary to comply with the demands of qualified personnel in the public and private employment market.
- To offer academic programs formulated so that youths and adults can develop their intellectual, affective, and motor competencies to allow them to become integrated in the employment market.
- To provide young individuals with economical and social disadvantages, a study environment that stimulates their intellectual capabilities and human skills.
- To develop in students Spanish and English communication skills, and technology skills to allow them effective-global competition.
- To promote in students human and ethic values development that will allow them to successfully develop as professionals in their academic field.
- To develop in students the capability to compete and achieve their personal and professional goals.
- To create a professional who knows his/her rights and responsibilities in society and in the occupational field where he/she will develop.
- To promote and maintain bonds with the private industry so the Institution is up-to-date with the tendencies in the industrial market and with new development and technologies.

#### 1.4 ACCREDITATION

MTC/MTI is an Educational Institution licensed to operate and authorized by the Puerto Rico Council of Education; accredited by the National Accreditation Agency, ACCET (Accrediting Council for Continuing Education and Training) with accreditation granted for five (5) years from August 30, 2019 until August 30, 2024; recognized by the United States Department of Education; and authorized by the State's approving agency to offer benefits to Veterans, active military personnel and their dependents only in the Caguas, Vega Baja, and Orlando Branch Campuses. The Orlando Branch

Campus is licensed by the Commission for Independent Education (CIE), Florida Department of Education. Additional information regarding this institution may be obtained by contacting the Commission for Independent Education, 325 West Gaines Street, Suite 1414, Tallahassee, Florida, 32399-0400, toll-free (888) 224-6684.

Mech-Tech College is also a member of the Technical University Network (INTECO) located in Caguas, Puerto Rico and of the Puerto Rico Manufacturer's Association.

This information can be obtained in the Office of the Vicepresident for Education at the Main Campus or the Office of the Occupational Director at the branch campuses.

# 1.5 FACILITIES AND EQUIPMENT

The Institution has the necessary equipment for students to develop their theory and practice abilities and competencies necessary for each of the programs.

The main campus facilities (Caguas) consist of: twenty three (23) administrative and student service offices, twenty two (22) classrooms, twenty (20) laboratories classrooms, one (1) tool room, a library, seven (7) bathrooms; in addition to a parking lot and 24-hour security. The facilities of the Mayagüez Campus consist of: nine (9) administrative and student service offices; a library; Server Room; one (1) vault; seven (7) laboratory classrooms; and six (6) regular classrooms. In addition, this branch campus has an additional location which offers the Collision Repair Program and has four (4) regular classrooms; one (1) reception and admissions area; the collision repair laboratory; a tool room; a storage room; and sanitary services; there is also 24-hour security. The facilities of the Bayamón Branch Campus consist of: fourteen (14) administrative and student services offices, fifteen (15) classrooms, three (3) laboratories/classrooms, ten (10) laboratories, a tool room, eight (8) restrooms, parking lot, and 24-hour security. The Vega Baja campus facilities consist of: thirteen (13) administrative and student service offices, seven (7) classrooms, twenty (20) laboratories classrooms, a tool room, two (2) computer laboratories, a library, thirteen (13) bathrooms, one (1) elevator; in addition to a parking lot and 24-hour security. The Ponce Branch has ten (10) administrative and student service offices, a vault, a tool room, bathrooms, and ten (10) classrooms/laboratories.

In addition, the Institution has access ramps and facilities for handicapped students and bathrooms with the necessary equipment for their use.

The Orlando Branch Campus has over 6 acres of land with three buildings and parking space that can accommodate over 150 vehicles. The main building consists of 15,640 square feet and has two floors. The first floor consists of service offices for Admissions, Career Services, and Finances in addition to a conference room (theater) in which group orientations are offered and which also serves as a multipurpose room for other educational activities. An access ramp is also located at the entrance of this building, as well as a large reception and waiting area, two restrooms, storage spaces, and an elevator.

The second floor has the President's office, a conference room, a reception and waiting area, various student services offices such as Registration, Financial Aid, and Accounting plus two restrooms, storage space, and an elevator.

The second building consists of 5,854 square feet and holds seven (7) regular classrooms that accommodate at least 25 students at a time. It also has an additional reception and waiting area, two restrooms, and a teacher's lounge/kitchen. It is a one story building where the Director's Office is

located, a computer laboratory and the Network IT Command Center are also located. This building is the students' main entrance and reception.

The third building consists of 18,100 square feet with 11 laboratories prepared and equipped for the study programs offered at the Branch Campus in addition to 11 regular (lecture) classrooms that provide for a unique teaching methodology and learning experience allowing for theory and practice to be taught in the same building. It has a teacher's break room, a tool room, storage area, and restrooms are also located in this building. In addition, there is an additional building that will have more space for the students to practice.

#### 2.0 GOVERNANCE

Mech Tech College, LLC is a limited liability company and is organized under the laws of the Commonwealth of Puerto Rico. Mech-Tech Institute of Orlando, Florida operates under Mech-Tech U.S. Corp., organized under the Laws of the State of Florida. All companies hold the same sole proprietorship.

#### 2.1 INSTITUTIONAL PROFILE

MTC/MTI was founded with the responsibility of training technical personnel of both genders in the field of metals, electricity and mechanics, and subsequently, electronics and refrigeration, in order to meet the occupational demands of the industry. The Main Campus is located in the City of Caguas, Puerto Rico. In addition, there is a second institution located in the city of Mayagüez; a third one in Bayamón and a fourth one located in Vega Baja. In 2009, a new Branch in Ponce, Puerto Rico was established and Mech-Tech College's Health Division opened. A branch campus operating as MTI is located in Orlando, Florida.

#### MECH-TECH offers the following technical programs:

- Advanced Automotive Technology
- Diesel Technology and Advanced Systems
- Automotive Mechanics
- Technology in Industrial Electricity with PLC and Renewable Energy
- Technology in Refrigeration and Air Conditioning
- Technology in Industrial Welding
- Technology in Marine Mechanics with Electronic Systems
- Technology in Automobile Collision and Auto Body Repair
- Technology in Advanced Automatic Transmissions
- Motorcycles Repair and Maintenance
- Technology in Racing Mechanics
- Audiovisual Technology and Security Systems (not currently licensed in Florida)

Mech Tech offers the following Associate Degree Programs in its Caguas and Vega Baja Branch Campuses:

- Associate Degree in Technology in Electrical Engineering
- Associate Degree in Automotive Mechanics Technology
- Associate Degree in Technology in Mechanical Engineering
- Associate Degree in Biomedical Equipment Repair

- Associate Degree in Industrial Electromechanical Technology
- Associate Degree in Dental Assisting with Expanded Functions (Caguas)

The Orlando branch campus offers the following programs of study:

- Technology in Diesel Mechan ics (48 credits)
- Technology in Industrial Welding (48 credits)
- Technology in Racing Mechanics (48 credits)
- Automotive Mechanics (48 credits)

The Institution offers the following supplementary courses in Technical Programs:

- Costs and Estimates
- Human Relations
- Technical English
- Industrial Safety
- Applied Mathematics
- Introduction to Computers
- Welding

In Associate Degree programs the supplementary and general courses are:

- Spanish
- English
- Mathematics
- Physics
- Humanities
- Human Conduct and Interpersonal Relations
- Introduction to Computers
- Business Ethics and Administration
- Industrial Safety
- Electronics Fundamentals
- Electricity Fundamentals
- Writing of Technical Reports

The Health programs offer Educational Electives in:

- Human Sexuality
- Ageing Psychology
- Puerto Rico and its Culture
- Religions of the World
- Occident Civilizations I and II
- Cinema and Society
- Ethics
- Introduction to Theater
- Musical Culture
- Human Relations

- Introduction to Computers
- Skills Development

The supplementary courses are aimed at preparing the student with the competencies required by the Industry and the curriculums meet all the requirements established by the various accrediting organisms, as well as learning centers, classrooms and laboratories. The teachers are highly qualified professionals who meet the necessary academic requirements.

#### 12.2 GOVERNING STRUCTURE OF THE INSTITUTION

#### 2.2.1 Members

Mech Tech College, LLC, is a limited liability company organized under the laws of the Commonwealth of Puerto Rico. Mr. Edwin Colón is the only owner of the company. In addition, he is the President, only Member and Administrator. The same ownership is maintained for Mech-Tech U.S., Corp., in order to operate as Mech-Tech Institute in Florida. Mech-Tech Institute is a fictitious name ("dba") of Mech-Tech U.S. Corp.

#### 2.2.2 President

The President has several advisory committees for academic, legal and public relations matters and supervises all Institutional sites: Caguas, Mayagüez, Bayamón, Vega Baja, and, Ponce; as well as the branch campus as MTI of Orlando, Florida. He receives advice from an Advisory Committee composed by representatives of public interest areas related to the training programs.

The President studies and approves the Institutional Development Plan and the Annual Operations Budget. He also studies and confirms the most relevant decisions pertinent to academic and administrative aspects of the Institution; furthermore, he is the one who formulates the short and long term institutional policy and is responsible for controlling and guaranteeing the accomplishment of the educational philosophy and objectives of the Institution.

The President directs, coordinates and supervises all organizational functional areas of the Institution and is the Chief Executive Officer of the Institution. He coordinates and implements the recommendations of the Advisory Committee, as well as the institutional policy. He makes other usual, fiscal, and administrative functions pertinent to his position and is also authorized to negotiate and to contract in representation of the Institution. He manages new academic programs and represents the Institution before other educational institutions, professional organizations and any other public or private agency.

#### 2.2.3 Board of Members

The Company Board of Members is comprised of:

**President** 

**Edwin J. Colón**Computer Programming
E.D.S. Corporation

#### 2.2.4 Administrative Personnel

#### **Caguas Branch Campus**

President - Edwin J. Colón-Cosme

Chief Operations Officer – Yadexy Sierra

Chief Analytical Officer – Francisco Colon

**Operations Manager** – Sarah Méndez

Operations Coordinator - Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller – José Maldonado

Accounting Director – Carmen T. Vázquez

Accounting Assistant - Luz Y. Alvira

Accounting Assistant - Kelvin Arroyo

General Ledger Analyst - Noé Cabrera

Accounts Payable – Emma Luisa Cardoza

#### Vice President for Administration / Fiscal Officer – Agüilda Gómez

Finance Officer – Sheyla Torres

Finance Officer – Carmen Álamo

Events Coordinator - Dolores Galarza

Vice President of Education – Isaías Rojas

**Local Education Expert** – Yolanda Huertas

Dean for Academic Affairs – Carla Fontán

Academic Director / Title IX Coordinator - Dr. César Toro

**Lead Coordinator** – Carlos Cruz

Occupational Director - Javier Claudio

Coordinator for VP of Education - Tahirí Rivera

Tool Room – José Maldonado

Purchases Director – Jonathan Del Valle

Purchases Officer – Bryan Gerena

Career Services Director - María Ramón

Career Services Officer - Marta Verónica Medina

Registrar – Mayra Marrero

Registration Officer – Yenitza Reyes

Registration Officer – María del Mar Estela

# Vice President for Student Affairs – Lydia Rojas, Esq.

Library Director - Carmen Rosado

Librarian – Miguel Rodríguez

Library Officer – Yaritza Fontánez

Auxiliary Librarian – Awilda Santana

Counselor - Sarah Barreto

Retention Officer – Bárbara Peñalvert

Retention Officer - Tanya M. Vélez

Nurse – María de los Ángeles González

#### Vice President for Admissions – Emilio Pérez

Admissions Officer - Alexandra George

Admissions Officer - Loise Ortiz

Admissions Officer - Mariechelle Méndez

Receptionist - Agnes I. Rivera

**Financial Aid Director** – Jessica Cruz

Financial Aid Officer – Adria Rodríguez

Financial Aid Officer - Sharon Pedraza

Financial Aid Officer - Luz González

Prevention Officer - Steven Candelaria

Prevention Officer - Vacant

Vice President of Planning and Development Affairs - José A. Algorri

Maintenance – Altagracia Sánchez

Maintenance - Edwin Berríos

Maintenance – Yamil Hernández

Maintenance – Joseph Arroyo

Vice President for Information Technology / Chief Information Officer (CIO) – Vacant

Information Systems Administrator – Adan Correa

Computer Technician – Raymond Torres

Computer Technician - Kendrick Rivera

### Mayagüez Branch Campus

President - Edwin J. Colón-Cosme

**Chief Operations Officer** – Yadexy Sierra

Chief Analytical Officer – Francisco Colon

Operations Manager – Sarah Méndez

Operations Coordinator – Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller – José Maldonado

Accounting Director - Carmen T. Vázquez

Accounting Assistant - Luz Y. Alvira

Accounting Assistant - Kelvin Arroyo

General Ledger Analyst – Noé Cabrera

Accounts Payable - Emma Luisa Cardoza

Vice President for Administration / Fiscal Officer – Agüilda Gómez

Finance Officer - Tomás B. Molina

Vice President of Education – Isaías Rojas

**Local Education Expert** – Yolanda Huertas

Lead Coordinator - Carlos Cruz

Occupational Director – Julio Illanas

Coordinator for VP of Education - Tahirí Rivera

Tool Room – Fredys Vargas

Tool Room – Raúl Rossy

Tool Room (Evenings) – José Morales

Purchases Director - Jonathan Del Valle

Purchases Officer - Bryan Gerena

Career Services Director - María Ramón

Career Services Officer - Héctor Ortiz

Registrar – Mayra Marrero

Registration Officer - Marilyn Pacheco

Vice President for Student Affairs – Lydia Rojas, Esq.

Counselor – Jessica Acosta

Library Director / Librarian - Carmen Rosado

Vice President for Admissions – Emilio Pérez

Receptionist - María Vega

Admissions Officer - Marisol Morales

Admissions Officer – Mary Ann Martínez

Vice President for Compliance – Belén González

Financial Aid Director - Jessica Cruz

Financial Aid Officer - Marangely Sánchez

Vice President of Planning and Development Affairs - José A. Algorri

 $Maintenance-Misael\ Rivera$ 

 $Maintenance-Luis\ Rodr\'iguez$ 

Maintenance - Santa Padilla

Vice President for Information Technology / Chief Information Officer (CIO) – Vacant

#### Information Systems Administrator – Adan Correa

Computer Technician II – Edwin Ojeda

#### **Bayamón Branch Campus**

President - Edwin J. Colón

**Chief Operations Officer** – Yadexy Sierra

Chief Analytical Officer – Francisco Colon

Operations Manager – Sarah Méndez

Operations Coordinator - Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller – José Maldonado

#### Accounting Director - Carmen T. Vázquez

Accounting Assistant - Luz Y. Alvira

Accounting Assistant - Kelvin Arroyo

General Ledger Analyst – Noé Cabrera

Accounts Payable - Emma Luisa Cardoza

#### Vice President for Administration / Fiscal Officer – Agüilda Gómez

Finance Officer - Rudy Millán

Vice President of Education – Isaías Rojas

**Local Education Expert** – Yolanda Huertas

**Lead Coordinator** – Carlos Cruz

Occupational Director – Eric Rivera

Coordinator for VP of Education - Tahirí Rivera

Tool Room – Ricardo Orama

Purchases Director - Jonathan Del Valle

Purchases Officer – Bryan Gerena

Career Services Director – María Ramón

Career Services Officer - Nilsa Ivelisse Navedo

Registrar – Mayra Marrero

Registration Officer – Nydia Pantojas

Vice President for Student Affairs – Lydia Rojas, Esq.

Counselor - Sara Barreto

#### Vice President for Admissions – Emilio Pérez

Admissions Officer - Cruz Milagros Ramos

Admissions Officer – Deymarie Hernández

Receptionist - Maribel Rosado

#### Vice President for Compliance – Belén González

Financial Aid Director - Jessica Cruz

Financial Aid Officer – Leslie M. Algea

#### Vice President of Planning and Development Affairs - José A. Algorri

Maintenance - Bryan M. Rosa

Maintenance - Vacant

#### Vice President for Information Technology / Chief Information Officer (CIO) – Vacant Information Systems Administrator – Adan Correa

Computer Technician – Raymond Torres

Computer Technician - Kendrick Rivera

#### Vega Baja Branch Campus

President - Edwin J. Colón

Chief Operations Officer - Yadexy Sierra

Chief Analytical Officer – Francisco Colon

Operations Manager – Sarah Méndez

Operations Coordinator - Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller - José Maldonado

Accounting Director - Carmen T. Vázquez

Accounting Assistant - Luz Y. Alvira

Accounting Assistant – Kelvin Arroyo

General Ledger Analyst - Noé Cabrera

Accounts Payable – Emma Luisa Cardoza

Vice President for Administration / Fiscal Officer – Agüilda Gómez

Finance Officer - Javier Torres

Vice President of Education – Isaías Rojas

**Local Education Expert** – Yolanda Huertas

Lead Coordinator – Carlos Cruz

Dean of Academic Affairs – Carla Fontán

Occupational Director - Eric Rivera

Coordinator for VP of Education - Tahirí Rivera

Tool Room - Kevin Castillo

Purchases Director - Jonathan Del Valle

Purchases Officer - Bryan Gerena

Career Services Director - María Ramón

Career Services Officer - Aidaliz Pantoja

Registrar – Mayra Marrero

Registration Officer – Cassandra Díaz

Registration Officer – Alexandra Echevarría

Library Director - Carmen Rosado

Librarian - Vacant

Evening Librarian – Vacant

Vice President for Student Affairs – Lydia Rojas, Esq.

Counselor – Javier Semidey

Nurse - Greysha Bracero

Vice President for Admissions – Emilio Pérez

Admissions Officer - Sheila M. Ávila

Admissions Officer – María Vázquez

Receptionist – Marilyn Marrero

Vice President for Compliance – Belén González

Financial Aid Director - Jessica Cruz

Financial Aid Officer – Emilys Reves

Financial Aid Officer - Ana M. Cardona

Vice President of Planning and Development Affairs - José A. Algorri

Maintenance - Suheily Bracero

Maintenance – Tamara Martínez

Vice President for Information Technology / Chief Information Officer (CIO) - Vacant

Information Systems Administrator – Adan Correa

Computer Technician - Raymond Torres

Computer Technician - Kendrick Rivera

# **Ponce Branch Campus**

President - Edwin J. Colón

Chief Operations Officer – Yadexy Sierra

Chief Analytical Officer – Francisco Colon

**Operations Manager** – Sarah Méndez

Operations Coordinator – Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller – José Maldonado

Accounting Director - Carmen T. Vázquez

Accounting Assistant – Luz Y. Alvira

Accounting Assistant – Kelvin Arroyo

General Ledger Analyst - Noé Cabrera

Accounts Payable – Emma Luisa Cardoza

Vice President for Administration / Fiscal Officer – Agüilda Gómez

Finance Officer – Hildaliz Vélez

Vice President of Education – Isaías Rojas

**Local Education Expert** – Yolanda Huertas

Lead Coordinator – Carlos Cruz

Occupational Director – Julio Illanas

Coordinator for VP of Education - Tahirí Rivera

Tool Room - Carlos Martínez Rivera

Purchases Director - Jonathan Del Valle

Purchases Officer - Bryan Gerena

Career Services Director - María Ramón

Career Services Officer – Lourdes Rodríguez

Registrar – Mayra Marrero

Registration Officer – Yaritza Rivera

Vice President for Student Affairs – Lydia Rojas, Esq.

Counselor - Jessica Acosta

Vice President for Admissions – Emilio Pérez

Admissions Officer - Sheila Ruiz

Admissions Officer – Nydia E. Colón

Receptionist – Débora Jiménez

Vice President for Compliance – Belén González

Financial Aid Director - Jessica Cruz

Financial Aid Officer - Pamela Rivera

Vice President of Planning and Development Affairs - José A. Algorri

Maintenance - Jan Carlos Toro

Maintenance - Raymond Rosado

Vice President for Information Technology / Chief Information Officer (CIO) - Vacant

Information Systems Administrator – Adan Correa

Computer Technician II – Edwin Ojeda

#### Orlando, Florida Branch Campus

President/C.E.O. - Edwin J. Colón-Cosme

Chief Operations Officer - Yadexy Sierra

Chief Analytical Officer – Francisco Colón

Operations Manager – Sarah Méndez

Campus Director – Mayra Sánchez

Operations Coordinator – Velmarie Merced

Presidency and Operations Coordinator - Verónica Rivera

Controller – José Maldonado

Vice President for Administration/Fiscal Officer - Aguilda Gómez

Human Resources Specialist - Vacant

Finance Officer - Eliud León

Vice President for Compliance – Belén González

Financial Aid Director - Jessica Cruz

Financial Aid Officer – Jessica López

Vice President for Student Affairs – Lydia Rojas

Vice President for Admission – Emilio Pérez

Enrollment Manager – Emeline Figueroa

Receptionist/Office Assistant – Samantha Hernández

Admissions Representative – Tiarah González

Admissions Representative – Alexis Vargas

Vice President of Planning and Development Affairs - José A. Algorri

Maintenance – Margarita Batista

Vice President of Education – Isaías Rojas

Lead Coordinator – Carlos Cruz

Tool Room – Vacant

Career Services Director – María Ramón

Career Services & Student Life Officer – Vacant

Registrar – Mayra Marrero

Assistant Registrar – Vacant

Vice President for Information Technology – Vacant

Information Systems Administrator – Adan Correa

Computer Technician – Vacant

# 2.2.5 Advisory and Interaction Committees

The Advisory Committees of Mech Tech College are support teams composed of people who have the knowledge, competencies and experience, which allow them to serve as liaisons between the school, Industry and the community in general.

The Advisory Committees' participation is of great importance in strengthening and enhancing technical education. These committees advise the school regarding planning, development and review of the training courses offered to the staff, curricular review and other educational programs, which can be implemented.

The Advisory Committees of our Institution represent different community sectors, such as: the industry, leading businesses, and the banking sector.

The committees should identify job market trends and demands for human resources in the area of technical and industrial education. In addition, they should provide the Institution with information regarding the standards established in the technical curriculum, as well as technological changes and needs existing in the labor field. They also advise the Institution regarding its curricula, teaching materials, tools, equipment, and establishment of skill-performance levels, competencies, goals and objectives in the development of the short-term action plan. In addition, they participate in job opportunity searches for students who have graduated from the Institution; provide orientation to business owners regarding the technical courses offered and stimulate the teachers and students in developing occupational competencies, open houses and others.

For Mech-Tech Institute, the advisory committee meets at least once a year.

#### 3. 0 POLICIES

#### 3.1 NON-DISCRIMINATION POLICY

MTC/MTI does not discriminate for reasons of race, color, age, gender, religion, nationality, marital status, political affiliation, ethnic origin or physical disability which does not interfere in the accomplishment of the study program and/or job performance.

#### 3.2 POLICY OF PROVIDING INFORMATION TO STUDENTS

The Institution will not provide information about a student to third parties. To release information, students must authorize it in writing by filling out a form for those purposes in the Registrar's Office,

indicating the person(s) name and the type of information to be furnished; Federal Law approves this policy.

#### 3.3 DRESS CODE

Students who enroll starting February 2013, are required to wear a uniform. The uniform was designed to comply with the safety standards required in the occupational fields offered by the Institution and complies with the purpose of students to develop a higher level of professionalism.

For the Health Division, uniform is required for students who enroll in the Associate Degree in Dental Assisting with Expanded Functions.

Since February 2013, students are required to use the institutional uniform which was designed to comply with the safety standards required in the occupational fields offered by the Institution and that contributes to the development of a high level of professionalism in students.

# 3.4 PROCEDURES FOR REPORTING EMERGENCIES AND CRIMES OCCURRING WITHIN INSTITUTIONAL FACILITIES

All emergencies or crimes occurring on campus will be processed as follows:

- ✓ The employee or affected person will inform the incident to the Vice-President for Academic Affairs and/or the Vice-President for Administration or an authorized office of the Institution. If the incident involves a student, it will be notified to the Vice-President and/or the Dean for Student Affairs. These authorized officers will be responsible of notifying the concerning agencies which may include the Police Department and/or Medical Emergencies. The Vice-President for Academic Affairs and Student Affairs will maintain a registry of each incident informed.
- ✓ The following incidents should be reported to the Institution's authorized representatives: theft or damage to vehicles, muggings, assaults, peace disturbance, sexual offenses, unlawful entry into school premises, vandalism, domestic violence, sexual harassment, or any other incident that affects the normal school's operations. Any incidents related to discrimination based on religion, race, political affiliation, sex, age, disability or any reason contrary to law, should also be reported.
- ✓ We will log all incidents reported and will publish those incidents to the student community each September.
- ✓ All students and employees must follow the security personnel instructions for their protection. The security or administrative personnel shall deny access to the Institution to persons possessing alcoholic beverages, drugs, firearms or any other items, which violates Student Regulations. A student, who commits violations, will be referred to the school's Vicepresident for Student Affairs and to the Counselor for the corresponding action as established in the Student Handbook.
- ✓ The Counseling Office (where available) will offer lectures during the year to students and employees regarding prevention of crime, sexual offenses and personal safety. Those who are interested may request guidance and information on those subjects.
- ✓ Unauthorized persons may not enter the Institution; the administrative staff should work in coordination with the closest headquarters of the local Police.

✓ All students and employees will keep the Institution's Anti-Drugs and Alcohol Policy in an accessible location.

#### 3.5 POLICY PROHIBITING SEXUAL HARASSMENT

MTC/MTI's policy and practice is to ensure equal employment opportunity to all, regardless of race, color, age, religion, sex, national origin or social condition, disability, Vietnam or any other veteran status, marital status, to allow and/or accept any direct or indirect conduct that constitutes sexual harassment or any other legally protected condition. The Bill of Rights of our Constitution establishes that the dignity of human beings is not to be violated, and that we are all equal before the law, while clearly stating that no discrimination may take effect for the aforementioned reasons. This policy applies to all personnel of the Institution and employment practices such as recruitment, promotion, evaluation and training; among others.

The practice of sexual harassment in the workplace and academic environment, in any of its forms, infringes on the inviolability of human beings and constitutes clear discrimination against men or women in the work environment. It interferes with people's ability to work and deprives them of the enjoyment of a full life to which all human beings have a right in equal circumstances under the law, as expressed in the constitutional mandate and it is one of the manifestations of discriminations on the basis of sex; this includes men and women. The magnitude of this problem is of concern and interest to all since sexual harassment in the workplace and/or classroom constitutes an unacceptable offense against the dignity of all human beings.

The purpose of this policy is to provide a working environment that is free of harassment and intimidation, which will allow all employees to carry out their administrative and academic work. The presence of harassment or intimidation in the workplace is a violation of this policy and will be addressed according to the corrective measures determined by the Institution; therefore, any behavior or verbal expression, whether written or physical, of a sexual nature that could create an offensive or intimidating work environment for an employee or that interferes or could interfere with the work of an employee, is prohibited. Likewise, the solicitation of sexual favors and/or sexual advances towards our employees and/or students is strictly prohibited.

Law No. 17 of April 22, 1988 (applies only to Puerto Rico) and the regulations of our Institution provide that workplace sexual harassment is constituted by solicitation of sexual favors, unwanted sexual advances or other physical or verbal conduct of a sexual content:

- 1. When submitting to such conduct implicitly or explicitly constitutes a condition or term for obtaining or maintaining employment or continuity as a student.
- 2. When submission to or rejection of such conduct is used as the basis for making employment decisions or in the student's academic evaluation.
- 3. When this conduct has the effect of interfering unreasonably with the performance of work (whether administrative or teaching) of the employee or creates an intimidating, hostile or offensive environment for the employee.

Sexual harassment can be expressed through sexual insinuation or indirect comments, physical contact and even sexual aggression.

Disciplinary sanctions are applicable to employees and/or students who engage in sexual harassment, as provided in the Institutional policy on harassment at the workplace.

#### 3.5.1 IN THE EVENT OF SEXUAL ASSAULT

If the event involves an employee, it must be notified to the Vice-President for Administration and/or the Branch Campus Coordinator. If it involves a student, the incident must be notified to the Vice-President and/or Dean for Student Affairs and to the Counselor. The Institution is committed to arrange medical assistance to the student and offer first aid. In addition, it will coordinate any assistance with the local Rape Victims Help Center.

#### 3.6 STUDENT RIGHT TO KNOW POLICY

All Institutions receiving Title IV Program funds have the obligation to provide information to any student or prospect regarding their retention and graduation rates. Mech Tech, pursuant to Public Law 101-542, known as the "STUDENT RIGHT TO KNOW", will report its retention and graduation rates on July 1 of each year.

In addition, MTC/MTI will inform students of any changes made in the Institution.

#### 3.7 CAMPUS SECURITY ACT POLICY

The Institution recognizes, as an institutional interest, the protection of life and safety of all its members, and has developed the <u>On-Campus Safety Policy</u> in compliance with Federal Regulations and provisions of the "Crime Awareness and Campus Security Act". This act requires the establishment of a policy, which allows a safe working and study environment, free of risks, acts of rape and danger. The law recognizes the right of students, potential students, and the community in general to be informed about criminal acts occurred in the Institution.

This document will be given to each candidate, student and staff member of the Institution and provides for the procedure to follow in the event of emergencies within institutional premises. It applies to students as well as to faculty, visitors and the administrative staff.

The objective of this policy is to establish a basic emergency procedure to guarantee the protection of life and property on institutional premises.

The policy covers emergencies such as:

- Murder / Negligent involuntary homicide
- Forced sexual offense (including rapes)
- Unforced sexual offense
- Robbery or theft
- Aggravated assault
- Motor vehicle theft
- Theft of vehicle accessories
- Arson
- Simple assault
- Violations of alcohol abuse laws
- Violations of controlled substance laws
- Illegal weapons possession
- Threats

 Discrimination/Crimes due to causes of discrimination based on race, religion, sexual orientation, and country of origin or others.

#### 3.8 NON-SMOKING POLICY

The Institution prohibits the student community from smoking in the Institution and in any closed spaces, such as: classrooms, laboratories, hallways, offices, the library and restrooms; among others.

#### 3.9 RECIPROCAL RIGHTS AND DUTIES OF THE INSTITUTION AND THE STUDENTS

MTC/MTI is committed to maintaining an educational environment based on the promotion of healthy lifestyles and respect for the teaching-learning process. It has also established a policy regarding Drugs and Alcohol based on the Drug Free Schools and Communities Act of 1989 (Public Law 101-226 and the Internal Regulations of the United States Department of Defense).

The use, handling and distribution of controlled substances as well as the consumption of alcohol within institutional premises will entail the sanctions stipulated in the **Regulations on the Illegal Use** of Drugs and Alcohol Abuse, Faculty and Administrative Handbooks.

The Institution prohibits any form of on-the-job harassment and in the academic environment, since it considers it, besides being illegal, to be against the Institution's best interests. Under no circumstances, will it allow academic or administrative staff or members of the student body to engage in behavior which can directly or indirectly create a working and/or student environment in which aspects of sexual harassment or harassment of any other kind are present.

The institutional policy promulgated to that effect sets forth the sanctions applicable to students or academic and administrative staff or personnel who engage in violations of the statute.

The Student Handbook contains the regulatory provisions, which protect students and establishes the rules and responsibilities of Mech Tech students as well as the rights and privileges, which they enjoy.

The Institution has established procedures for filing and hearing complaints made by students regarding situations, which are affecting them. It also has systems for appealing decisions related to their academic progress. The Vicepresident of Student Affairs is the officer in charge of channeling and dealing with situations related to student rights and responsibilities.

#### 3.10 POLICY IN COMPLIANCE WITH LAW 186

Mech-Tech College has developed a policy in order to comply with Puerto Rico Law 186 of September 1, 2006. This policy has the fundamental intention of maintaining in strict confidentiality the social security number of the students and prospects; the number will only appear in official documents of the Institution. For more information, please refer to the Registrar's Office in any of our sites. This policy is not applicable to MTI of Orlando, Florida.

# 3.11 BULLYING PREVENTION POLICY

All students have the right to feel safe in their personal and social lives. The Institution prohibits harassment, threats, and bullying among students. This behavior is classified as actions of systematic violence, psychological, physical, or sexual from the student or group of students towards their class peers who are not in position of defending themselves (Lex Juris, Law 37 from April 10, 2008).

MTC/MTI promotes a policy free of threats and intimidation so that students can develop in a safe study environment. The Institution will work with the prevention of bullying by offering workshops through its Counseling personnel and if a complaint is filed, the Vice-Presidency for Student Affairs will intervene and apply the procedure established in the Student's Handbook. The Institution will also protect the documents of the students' records and academic history. The students will have a healthy student life where their rights are protected to help them achieve their academic goals; they will also have the opportunity of selecting their field of studies freely.

#### 3.12 POLICY FOR TREATMENT OF STUDENTS WHO SUFFER FROM ASTHMA

In compliance with Law 56 of February 1, 2006, "Law for Treatment of Students who Suffer from Asthma", (not applicable to MTI of Orlando, Florida) Mech-Tech College recognizes the right of students who suffer from asthma or any other related condition, to administer, on their own, the prescribed medicine while at school, with their parents, tutor, and/or legal guardian's consent in case that the student is a minor.

For an underaged student to administer on his/her own the medicine for asthma treatment, a medical certification will be required which will state that the student suffers from the condition, the medicine to be used for its treatment, and that the student has been trained to administer it on his/her own. It will be the parents, tutor and/or legal guardian's responsibility to present the updated documents so that the student can make use of this right.

Whoever interferes with the exercise of this right will incur in an administrative fault amd will be exposed to a fine according to the Law. A person who acts in conformity to the Law will not incur in civil responsibility in case that a complication emerges for the use of a medicine that the student administers on his/her own.

#### 3.13 VACCINATION POLICY

This policy applies to all students under 21 years of age who request admission to Mech-Tech College for all its Puerto Rico Branch Campuses.

According to the Procedures and Regulations of the Health Department concerning the Tests for Transmitted Diseases and Students' Vaccination, it is required that all students who are admitted in Mech-Tech College until the age of 21 years, comply with the following vaccination requirements:

- 1. A reinforcement dose of the following vaccines: Tetanus, Diphteria, and Acellular Pertussis (Tdap) and/or a reinforcement of Tetanus and Diphteria (Td) within the last 10 years or according to the case.
- 2. Two doses of the following vaccines: Common Measles, German Measles, and Mumps (MMR).
- 3. Three doses of the Hepathitis B vaccine.
- 4. Three doses of the Polio (OPV/TPV) vaccine if the last one was administered on or after the fourth year of age.
- 5. Vaccine against Chicken Pox (VAR); one dose is recommended for adolescents between the ages of 11 to 18 years and complete a second dose according to the existing regulations or a signed declaration by the doctor specifying that history of having contracted the disease exists.

These vaccines must be registered in the PVAC-3 form (green paper).

Students, who for religious beliefs are not vaccinated, must present a sworn statement or a certification from the physician; nonetheless, the exemptions for religious beliefs will be null in case that an epidemic is declared by the Secretary of Health.

#### 4.0 OFFICE SERVICES

#### 4.1 ADMISSIONS OFFICE

This office evaluates applications of all prospects or candidates. In this office, the documents required for student admission are received, the administration of the admission exam for students in the Ability to Benefit Program are coordinated, (not presently offered) prospective students are interviewed and their eligibility for admission is determined.

#### 4.2 REGISTRAR'S OFFICE

This office keeps custody of all student files and transcripts regarding their academic progress. It processes registrations and withdrawals, grades, academic progress and student evaluations and produces official lists, course certifications, graduation certifications, transcripts, and diplomas.

#### 4.3 COLLECTIONS OFFICE

This office maintains a subsidiary in which the student's financial record is reflected, including payments and refunds. It collects fees pertaining to the study contract, including other related charges, I.D. Card and credit transcripts.

# 4.4 FINANCIAL ASSISTANCE OFFICE

This office offers guidance regarding Federal Aid packages and all the processes related to the Pell Grant and other aid packages. This office also evaluates students' eligibility for the granting of federal and state aids and processes all scholarship applications from eligible students. The office is governed by the Rules and Regulations of the U.S. Department of Education's Title IV Funds and the policies of the Council of Education of Puerto Rico (CEPR) in its local (State) programs.

# 4.5 CAREER SERVICES OFFICE (PLACEMENT)

This office assists students in job searches and gives them guidance in finding jobs upon graduation in the public or private sector. It assists in follow-up of graduation candidates and filling out the Board Exam applications (in Puerto Rico) in order to increase their employment prospects. The Institution does not guarantee employment to students, prospective students or graduates, but it has always maintained a job placement average rate of 70% or more.

#### 4.6 OFFICE OF COUNSELING AND ORIENTATION

The Counseling and Orientation Office, available only in Puerto Rico, offers professional services which complement the professional and academic development of the student; it deals with academic and discipline problems, absenteeism, and personal problems of students. It also offers individual and

group counseling and orientation, workshops and referrals to government and private agencies according to the student's need.

The office coordinates extracurricular activities to encourage their integral development; it also offers the opportunity of reasonable accommodation for students with special needs. The Counseling and Orientation Office also handles students' referrals and students who are simply seeking the office's services. In addition, the office provides counseling and support to students who want to obtain their high school diploma.

In Mech-Tech Institute of Orlando, Florida, academic advising and personal advising are provided by the Occupational Director and the Enrollment Manager. In addition, the Vice President for Student Services at the main campus provides constant monitoring and provides additional support.

#### 4.7 ACADEMIC COMMITTEES

The Institution has the following Committees for the academic area:

- ACADEMIC PROGRESS COMMITTEE Responsible for reviewing the case of any student who fails to comply with the Satisfactory Academic Progress Policy.
- **RE-ENTRIES COMMITTEE** Responsible for making the necessary recommendations as to a student's re-entry application.
- **DISCIPLINE COMMITTEE** Responsible for attending all complaints filed against a student for alleged violations to the Student Handbook.
- INSTITUTIONAL DISCIPLINE COMMITTEE Responsible for attending all complaints from students against institutional employees. This committee will be presided by the Vice President for Administration. In case a complaint is presented against an instructor, the Lead Coordinator, the Occupational Comptroller, and/or Branch Campus Coordinator will attend the complaint.
- **APPEALS COMMITTEE** Responsible for handling the revision and appeals requests of students regarding grades and documents issued by the Registrar's Office.
- **INSTITUTIONAL GRANTS COMMITEE** Responsible of evaluating the applications for institutional grants of active students and of granting the corresponding aid. (Not presently active).

# 4.8 STUDENT ACTIVITIES

The Institution fosters activities that contribute to enhancing the students' quality of life. The Institution plans extracurricular activities during the academic year, such as: lectures, workshops, social, and cultural, sporting, and recreational activities aimed at the student's well-rounded development. The Institution also promotes the development of student groups and associations designed to contribute to the students' formation.

# 4.9 LIBRARY

Mech-Tech College has three (3) Educational Resources Centers (CREs) in its Main Campus in Caguas, and the branch campuses in Bayamón, Vega Baja, and Mayaguez. It offers students,

instructors, administrative personnel, and the community in general, informational resources and services that are relevant to the Institution's curricula as well as its professional and particular needs. The CRE's personnel works during class hours in a flexible schedule fit for the particular needs of our student community.

The printed and audiovisual connections, respond directly to different technical and academic areas which comprise our curricula. These resources are accessible to the academic community through the library network and library loans.

The CRE collections are in continuous growth which results in updated information services responding directly to the curricula and technology changes. The libraries have an on-line catalog in all its computers which provide direct and fast access to the information sources. The Web Catalog can also be accessed 24/7 through the Internet from any part of the World; from Mech-Tech's main page: <a href="http://www.mechtech.edu">http://www.mechtech.edu</a>, the library log can also be accessed through: <a href="http://www.bibliotecacre.tk/">http://www.bibliotecacre.tk/</a>

The Institution's library system has an annual budget which guarantees and maintains an updated collection responding to constant technology changes. All CRE personnel are highly qualified and possess the academic preparation in the library sciences field and vast experience in this profession. Mech-Tech Institute of Orlando, Florida has an educational resources area in which textbooks and references are available for students to use on campus.

The Library safeguards the use of its collection by protecting it from a copyright violation (Law of Author's Right, Title 17, United States Code). Students who make unauthorized use or distribution of copyrighted materials can face civil or criminal liabilities for violating this code.

#### 4.10 INFIRMARY

Mech-Tech College presently has an Infirmary in Puerto Rico in its Main Campus of Caguas and Branch Campus of Vega Baja and the Health Division at Mayagüez. The Infirmary is responsible for ensuring that the alumni receive quality preventive health care. The main purpose of the Infirmary is to promote the good physical, mental, and social health of the student community as well as achieving the best life styles. To achieve this purpose, the Infirmary works with the prevention and treatment of physical and emotional conditions. The infirmary provides services to the alumni, employees, and visitors. All services are provided at no additional cost. Some employees at the branch campuses are trained in first aid techniques.

The services we provide include educational talks, prevention clinics (HIV, Control of Sexually Transmitted Diseases, Alcohol and Drugs, Highway Accidents, Diabetes and Nutrition); among others.

#### 4.11 REQUEST FOR SERVICES

Students, who need services from the administrative offices, may request it through the use of a form prepared for this purpose. The form is available in the Reception area.

#### 5.0 RULES AND PROCEDURES

#### 5.1 ADMISSIONS

# **5.1.1** Admissions Policy

MTC/MTI, in its Admissions Policy, requires all students to have the required level of education. For students who have a High School Diploma or are from "Homeschooling", the minimum age requirement is 16. For students admitted through GED, the minimum age requirement is 18 years (CFR Part 668, Subpart J).

MTC/MTI serves all of those who decide to attain their academic goals through careers which allow them to develop personally and professionally. The Institution establishes a flexible Admissions Policy which allows access to anyone who shows genuine interest in pursuing higher education courses and meets the Institution's admission requirements.

The admissions staff at MTI of Orlando, Florida, who recruit prospective students or who participate in the admission of prospective students have completed an approved Admissions Training Program in compliance with the rules and regulations of the Commission for Independent Education (CIE) of Tallahassee, Florida.

The Institution is authorized to enroll Veterans and its beneficiaries who are referred by Federal and local agencies. These beneficiaries must comply with all the admission requirements in addition to those related with their condition of beneficiary by the corresponding agency in the Federal and local program. The Office for Veterans Affairs establishes that the beneficiaries must complete their program of study in the regular time of the program (100%) to receive their benefits. Just like regular students, both Veteran students, and recipients of Veterans' benefits, shall comply with all applicable Institutional Policies, and may not waive the credit validation process. Veterans Affairs will not pay for repeated courses if these were successfully passed by the student.

The school is approved by the Puerto Rico State Approving Agency to provide academic training to the students under the various GI Bill® programs (GI Bill® is a registered trademark of the United States Department of Veterans Affairs (VA).

#### 5.1.2 Admission Requirements for Technical Programs

The following are the admission requirements for Puerto Rico campuses:

- ✓ Admission Application (completed and signed)
- ✓ Original and sealed High School credit transcript or its equivalent (Law 188)
- ✓ If requesting transfer of credits, official transcript from college or university
- ✓ Vaccination Certificate (green paper and for candidates who are under 21 years old)
- ✓ \$40.00 non-refundable admission fee (valid for one year)
- ✓ Sign an Enrollment Agreement with the Institution.

For the Associate Degrees, provide all the requirements described above plus the candidate must have 2.00 or more grade point average in High School.

During the Admission process, the Institution notifies the prospective student of conditions that may adversely impact his/her ability to benefit from training, sit for certification/licensure examinations, and/or work in the field. These conditions may include: drug-related situations, negative background check, conduct problems, possession of a driver's license, debt with the *Administration for Child Support (ASUME)* (in Puerto

Rico), negative results during the verification of references for employment. The student acknowledges that he/she received the information in the *Certification of Orientation Received* form.

The Orlando (Mech-Tech Institute) branch campus offers its programs of study in English or Bilingual (Spanish/English).

For the Orlando Branch Campus, the requirements are:

- 1. Admission Application to be completed and signed; identifying language and session
- 2. Photo IDs (Driver's License/State issued ID/Military ID/Passport)
- 3. Standard High School Diploma or State Issued GED Diploma (GED accrediting body must be recognized by the United States Department of Education, USDOE, for Title IV funding purposes <a href="www.ed.gov">www.ed.gov</a>) and/or High School/GED transcripts (must be official, sealed, and stamped). The Institution may request additional information to validate high school.
- 4. Higher Education Transcripts (if requesting transferability of credits) official copy and sent directly to: Admissions Department, 8620 S Orange Blossom Trail, Orlando, Florida 32809)
- 5. \$40.00 non-refundable admission fee
  - \*The diploma must read Diploma (Certificate of Completion is not allowed)
  - \*High school transcripts must read: Standard High School Diploma (Certificate of Completion is not allowed)
  - \*High school students must pass the FCAT to receive an official Diploma
- 6. Complete and sign and Enrollment Agreement with the Institution

During the Admission process, the Institution notifies the prospective student of conditions that may adversely impact his/her ability to benefit from training, sit for certification/licensure examinations, and/or work in the field. These conditions may include: drug-related situations, negative background check, conduct problems, possession of a driver's license, or negative results during the verification of references for employment. The student acknowledges that he/she received the information in the *Certification of Orientation Received* form. Students in the Bilingual (Spanish/English) program receive an additional information/orientation sheet.

All veteran students or their beneficiaries who request admission to our Institution must provide all required documentation before the first day of class.

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® or Vocational Rehabilitation & Employment benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA Certificate of Eligibility by the first day of class;
- Sign a written request to be certified;
- Provide additional information that may be requested

# (GI Bill® is a registered mark of the United States Department of Veterans Affairs (VA)

#### **5.1.2.1** Homeschooling Policy

This policy does not apply to Mech-Tech Institute of Orlando, Florida. In Mech-Tech College we provide education to eligible students within our admission requirements including those under the Homeschooling Program.

A homeschooled student is that who has received an education in his/her home through the help of his/her parents.

A "Homeschooling" candidate in our Institution must comply with the following admission requirements:

- 1. Equivalence Certification from the Department of Education or Notarized Oath from the parents or tutor (Notarize the document "Certification of Homeschooled Students" provided by the Institution).
- 2. If the student's education is linked to a university in the United States, provide the certification issued by the university.

In addition, the student must comply with all the Admissions Requirements established by the Institution.

Mech-Tech Institute of Orlando, Florida does not admit students without high school diploma or equivalent valid GED.

# **5.1.3** Admission Requirements for Associate Degree Programs

Associate Degree programs are not offered in Mech-Tech Institute of Orlando, Florida. First-time admission applicants to Mech-Tech must comply with the following requirements:

- 1. Be a high school graduate or equivalent with a GPA of 2.00 or higher.
  - **a.** Students from recognized and accredited colleges, who at the time of graduating from high school or the equivalent had a GPA of less than 2.00 and who have been college students for the equivalent of one (1) year with a GPA of a minimum of 2.00 may apply for admission and receive course credit from MTC/MTIech Tech College.
  - **b.** Students from recognized and accredited colleges, who at the time of graduating from high school or its equivalent had a GPA of less than 2.00 and has graduated from a technical program with an average of 2.00, can solicit admission and credits transfer in our Institution.

- 2. Duly filled out Admission Application and \$40.00 admission fee, which expires after one year.
- 3. Original official High School Transcript.
- 4. Original PVA-3 Vaccination certificate (applicants under 21 years of age).

To be admitted, a candidate must have a high school diploma. If the candidate graduated from an accelerated high school equivalency program, the minimum age required is 16 years.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the program of study.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided additional training in the areas of deficiency presented in the exam.

In the Associate Degree for Biomedical Equipment Repair Program, the Clinical Phase (Practice) is currently available during the daytime only. There are no evening practice centers available in Puerto Rico for this profession. The student must make proper arrangements to complete their practice during the day in the last term of studies.

#### **5.1.4** Admission Requirements for Clinics (Health Division)

Health-Allied Programs are not offered in Mech-Tech Institute of Orlando, Florida. For the Clinics, the students must provide all documentation required in the previous admission requirements as well as the following:

- 1. Police Background Check Certificate
- 2. Medical Certification (provided by the Admissions Office)

#### **5.1.5** Admission Requirements for Foreign Students

- 1. Foreign prospects must complete the admission requirements of the Institution as applicable for Technical Programs and Associate Degrees. (Not presently available in Mech-Tech Institute of Orlando, Florida).
- Provide high school diploma and/or its equivalent. The copy must be validated by the Education Ministry of the country and/or by the American Embassy.
- 3. For Associate Degrees, provide copy of the official secondary education Credits Transcript validated by the Education Ministry of the country and/or by the American Embassy which shows a general grade point average of 2.00 and/or more in a scale of 4.00.

#### Equivalence chart:

The following chart will be used in the conversion of the general grade point average equivalent to our educational system based on a scale of 0 to 4 points. The conversion for countries where the value of academic progress is *Excellent*, *Outstanding*, *Acceptable*, *Insufficient*, and *Deficient*, the conversion will be as follows:

EQUIVALENCE CHART IN GRADE POINT AVERAGE		
Foreign countries (where this scale is applicable)	Conversion for Mech Tech College	
Excellent	4.00 – 3.50	
Outstanding	3.49 - 2.50	
Acceptable	2.49 – 1.60	
Insufficient	1.50 - 0.8	
Deficient	.79 – less	

Cases that have a different value than what is shown above will be evaluated individually and will receive the necessary orientation for referral to the corresponding education agencies where they can obtain the conversion or equivalence according to our educational system.

- 1. Foreign students under 21 years of age must present evidence of their vaccination records which will be validated in Puerto Rico according to Law 25 of the Health Department of Puerto Rico.
- 2. In those cases where the language of the academic records is not English and/or Spanish, the candidate must submit a translation certified by the school of origin.
- 3. The academic record must be validated by the Education Ministry of the country and/or by the American Embassy. Official information must also be sent regarding the grades system used for academic achievement and evidence of titles and diplomas received.
- 4. Foreign students must request a Visa for entry in the United States. If the student will be enrolled in vocational and/or technical programs, he/she must request an M-1 visa. It is required that all foreign students are enrolled full-time during their period of studies.
- 5. The prospect must show that he/she has the financial capacity of paying for their studies and lodging during the length of their studies.
- 6. Once the student is admitted, he/she will have a sponsor who will be responsible for financing their tuition.
- 7. Due to the fact that international students cannot work to earn money and pay for their education and personal expenses, they must make arrangements to have a sponsor who has the money available to pay for their expenses.
- 8. The sponsor has the obligation providing financial support to the student while being in American territory for which a document will be signed stating the sponsor's compromise to finance the student's studies.
- 9. The sponsor must provide income evidence by submitting the following documents:
  - a. Fill out a Financial Certification and Declaration together with the following documents:
    - i. Letter from the company and/or institution where he/she works which indicates the monthly income
    - ii. Copy of the Income Tax Return

- iii. Pay stub; report from the bank with official letterhead indicating the amount available in the account. The minimum amount in the bank of a sponsor must be \$18,215.00.
- iv. If the student is going to pay for his/her expenses, he/she must send a bank statement indicating that he/she has enough money in the account to pay for the tuition until completing a degree.
- v. If the international student has a promise that an institution from his/her country of origin will pay for tuition, the student must provide a letter from the organization which states its compromise of paying for the tuition.
- vi. Foreign students must request a Visa for entry in the United States. For this, they must wait for the Acceptance Letter from the Institution.
- vii. These documents must be sent to the Admissions Office. If the certification and documents comply with the sponsorship requirements, Immigration Form I-20 will be issued and sent to the prospect.
- 10. The prospect will continue with the steps and payments required for his/her transfer and enrollment in the Institution. The PDSO of the Institution will maintain a record of each of the students enrolled in our Institution. These records must be updated with the student's information. The DSO from the branch campuses will maintain this information updated and will send it to the PSDO who will maintain SEVIS updated.

Foreign students must comply with the current Attendance Policy and with all other institutional requirements. At all times, they must maintain their status as active students under the corresponding classification. The Department of States of the United States issues a Student Visa for the purpose of **studying**, which is why actions that go against this purpose are not allowed. The foreign student must, without understanding it as a limitation: maintain his/her legal status at all times, maintain a full-time academic load, attend classes on a daily basis, and approve them. If the foreign student understands that he/she will not complete the program of study within the stipulated time, an extension must be requested at the appropriate time. The foreign student must comply with all regulations associated to his/her Student Visa including that once the program of study is completed, he/she must return to his/her country of origin within the time established in the regulation. It is required that the student maintains communication with the DSO while studying at our Institution.

#### **5.1.6** Admissions Procedure

- All applicants must have an interview with the Admissions Representative who will offer the candidate a general orientation regarding the Institution's admission requirements, programs offered, duration, costs, payment options, starting and ending dates, and employment possibilities in the occupational field he/she opts to study. In addition, the applicant will receive additional information, according to his/her interest. The candidate is then offered a tour of the Institution's facilities.
- Once the candidate has decided to study one program in particular, he/she fills out the Admission Application and is given orientation regarding the documents, which must accompany the application.
- Once the admission applications are received, they are evaluated and it is determined
  whether the candidate is accepted or not. If the applicant does not meet admission
  requirements, s/he will be notified in writing.

- Once the student is accepted, the enrollment agreement is filled out, the Financial Aid Office proceeds to fill out the PELL Grant application, the Registrar's Office prepares the student's file, his/her enrollment, and gives him/her guidance regarding the class program.
- For MTI, Orlando branch campus, applicants will identify in the admissions application the language session of the program.

#### **5.1.6.1** Admission Procedure for People with Disabilities

The admission procedure for an individual with physical impairment or any other disability is the same as that of any other student. These candidates are oriented of the programs and courses requirements, the facilities available for them, classrooms, and sanitary services; in addition to the counseling services offered by the specific branch campus they enroll in.

#### 5.1.6.2 Validation of High School Diploma and/or Credit Transfers

The objective of this procedure is to validate that the grade obtained by the student has been through an institution that operates under the approval of the corresponding agencies in Puerto Rico as in the United States and that such institution complies with the standards of law required to offer its educational services. This is done so that the student can benefit from Title IV funds, if eligible. This procedure applies to all prospective enrollees who request admission to MTC/MTI.

#### 5.1.7 Credits Transfer

A student may request an official credit transcript from MTC/MTI to go to another institution. The transcript is sent by regular mail within five (5) work days. If the other institution requires it, MTC/MTI will provide its Institutional Catalog which includes the description and objectives of the courses for all its programs of study.

Our Institution holds collaboration agreements with the following institutions in Puerto Rico: Central University of Bayamón (UCB), Polytechnic University of Puerto Rico, School of Plastic Arts of Puerto Rico (EAP), and the Interamerican University of Puerto Rico. These agreements allow our students the transfer of the majority of their credits to complete a higher degree in one of these institutions.

The transfer of credits received from Mech-Tech Institute to another institution is solely at the discretion of the accepting institution. No guarantee of transfer is made or implied by Mech-Tech Institute. Credits accepted by Mech-Tech as transferred in do not affect Satisfactory Academic Progress (SAP) measurement and do not count for final GPA; the student enrolled with credits transferred will be evaluated for academic progress made in the courses taken after the credits transfer has been approved and applied. For the courses taken, SAP will be monitored up to the maximum 150% time allowed to complete the program. SAP will be monitored every term and progress must be made according to the Institutional SAP policy. Please refer to the Policy under section 5.2.10 of this Catalog. The evaluation of credits to be transferred in has no cost and is performed during the admissions process. Credits accepted as transferred will be discounted from the total cost of the program and this is detailed in the Enrollment Agreement section 2.

Students who come from Postsecondary Technical-Vocational programs who wish to request admission to the Health Programs of Mech-Tech College, can request admission and must

request a profession skills and competencies evaluation test with a grade of (75% or more) and a direct authorization from the Director of the Health Programs before matriculating to be able to request a credits transfer from our Institution.

#### **5.1.7.1** Credits Transfer for Technical Programs

All graduates of our Institution who wish to enroll in any other of our programs will be given credit for classes, courses or laboratory sessions already taken that are similar to those of the new program. For course credit to be awarded no more than fifteen (15) years may have passed since the time the courses were taken. It should be noted that for course credit to be awarded, the passing grade must be at 70% or above and /or a grade of P (Passed). Candidates that have studied at another technical-vocational post-secondary institution which have an accreditation similar to that of the MTC/MTI may apply for awarding of course credit, provided they were passed with a 70% or higher grade and/or P. Students holding duly documented Associate, Bachelor's or higher degrees from accredited institutions and which classes or courses are similar to those of the MTC/MTI may apply for course credit for up to 70% of the credits for general courses and up to 30% of concentration courses and such credits will not expire.

#### **5.1.7.2** Credits Transfer Policy for Associate Degrees

Associate Degree programs are not offered in Mech-Tech Institute of Orlando, Florida. All Mech Tech College students who have a technical degree and enroll in the Associate Degree will receive course credit for technical courses having an equivalent curricular content and that have been passed with an A or a B grade. For course credit to be awarded no more than fifteen (15) years may have passed since the time the courses were taken. Graduates of our institution who at the time of graduation from high school or the equivalent had a GPA of 2.00 or lower and who graduated from an academic program of study of Mech-Tech College with a minimum of a 2.00 GPA may apply for admission and course credit at Mech Tech College.

Students holding duly documented Associate, Bachelor's or higher degrees from accredited institutions and which classes or courses are similar to those of the Mech Tech College according to the course descriptions and curricular content may apply for course credit for up to 70% of the credits for general courses and up to 30% of concentration courses and such credits, provided that such courses were passed with a 70% or higher grade and /or a P or AP grade

Students coming from other accredited colleges who at the time of graduation from high school or the equivalent had a GPA of less than 2.00 and who currently have had the equivalent of one (1) year of post-secondary education with a minimum GPA of 2.00 may apply for admission and course credit at Mech Tech College.

Students from Postsecondary Technical-Vocational programs that are interested in requesting admission to the Health Programs in Mech-Tech College, can request it, and must request a skills and competencies evaluation test that must approved with a

grade of 75% or more, and an authorization from the Director of the Health Division before matriculating to be able to request the credits transfer to our Institution.

#### 5.1.7.3 Credits Awarded through Challenge Tests

Applicable only to Associate Degrees in Puerto Rico, these tests are prepared by the Mech Tech College faculty according to the Institution's curriculum and are designed to evaluate students' proficiency in the course for which he/she is requesting the test. Students who apply for course credit shall be enrolled in the institution and may not have been enrolled in the course which is to be challenged. Students will apply for the challenge test and pay the corresponding fee. The test must be passed with a grade of 75% or more. Course credit may be awarded for a maximum of 12 credits. No grade will be awarded for course credit awarded through this method and they shall be noted as "passed," using the letter P.

#### **5.1.7.4** Credits Transfer for Veterans

Veteran students or their beneficiaries must submit the official credit transcripts of all previous institutions. The Veterans Administration will only grant two (2) semesters for the certifying officer to evaluate and grant the previous credits, if applicable. For veteran students or their beneficiaries at Mech-Tech Institute, if the student has previous studies at another institution, the request of an official credit transfer is mandatory.

# 5.1.8 Program Transfers

If a student transfers from one program to another, or has completed a program and continues studying in another, he or she may receive credit towards the new program of study for such credits or units as those of similar content and requirements which were taken taken and passed with a minimum grade of 70% (C).

#### **5.1.8.1** Transfer Students in Associate Degree Programs

MTI of Orlando, Florida does not offer associate degree programs. Students with credits from other duly authorized and accredited post-secondary institutions and colleges will be classified as transfer students if such credits qualify for the associate degree program of study for which admission is being sought. Transfer students must meet the admission requirements for new students in addition to submitting the official transcript from the institution of origin. Students with a post-secondary degree from another institution will not be required to submit a high school transcript. Their records should show that they graduated from high school.

# 5.1.8.2 Appeals Process for the Denial of Credits Transfer

If the credits transfer requested by the student is denied, he/she has the right to appeal this decision. The student will appeal to a member of the Admissions Office who will coordinate an interview with the Dean or Director or authorized person at the branch campus and will discuss why the transfer was denied and if there is any possibility for reconsideration.

#### 5.2 REGISTRAR'S OFFICE

The Registrar's Office offers services such as: enrollment, transcripts, course certifications, grades and satisfactory academic progress reports.

The Registrar's Office will not offer services to students who are in financial debt with the Institution or have pending documents. Once the student has complied with his or her obligations, he/she will be offered the service requested.

#### 5.2.1 Enrollment

The Registrar's Office tracks the enrollment process. Once the students are admitted, they receive instructions related to the study program and enrollment process.

The Registrar is the officer custodian of the student files. A program will not be considered valid without the Registrar's certification. Students are responsible to comply with the academic obligations listed in their class schedule.

It is mandatory that students enroll on the date and at the time assigned by the Registrar's Office. If the documents required by the Admissions Office are incomplete, the student will not be allowed to enroll.

If after the students are enrolled, there is no quorum (15 students or more) for the program applied for, the Institution reserves the right to close down that section and the students will be called as soon as such quorum (15 students or more) is completed.

#### **5.2.1.1 Enrollment Policy**

It is the Institution's policy to enroll students on a quarterly basis (August, November, February and May). Nevertheless, the Institution reserves the right to enroll and start new courses on other dates, depending on the availability of classrooms, professors and other resources. There will be one week for late enrollment for each enrollment period and it will vary according to the holidays.

#### 5.1.2.2 Class Schedule

The Institution's class schedule is the following:

SECTION	DAYS	SCHEDULE
Day	Monday - Friday	7:30 a.m 1:30 p.m.
Afternoon	Monday - Friday	1:30 p.m 5:00 p.m.
Night	Monday - Friday	5:00 p.m 10:30 p.m.
Saturday	Saturday	8:00 a.m. – 5:00 p.m.

Note: The schedule will vary according to the enrollments for each term.

#### **5.2.2** Readmissions (Re-entries)

A student, who ends or has interrupted his/her studies for a Quarter or more and is interested in resuming his/her studies, has to apply for Readmission. The applicant should fill out the appropriate form in the Registrar's Office. A student, who has been withdrawn during a

Quarter or a year for academic deficiency, may apply for readmission upon the conclusion of his/her suspension period. The student will have to fill out the readmission form and undergo the respective orientation at the Registrar's Office.

#### **5.2.3** Attendance Policy

As an educational Institution, Mech-Tech College expects its students to come to class as established in their class schedule and in the time specified. Student, this is for your benefit and as a future candidate for employment! Follow Mech-Tech's Attendance Policy and you will do great!

Attendance to class is mandatory.

#### MINIMUM STANDARD

In order for a student to complete or graduate from a program, the student must have a minimum of 80% attendance. The 80% of attendance is an absolute requirement. In case of absences, the student will be responsible for the material given in class

#### **TRACKING**

Faculty shall take daily attendance and maintain an attendance record of all students. Attendance is tracked in every class by instructors using a form provided by the institution (Attendance Roster). Faculty will report daily attendance of all students and the Registrar office will input that information in the student information system. Faculty will also report all students who fail to attend class or have never attended. The cumulative attendance information is monitored each term and those students with an attendance record below 80% are informed so in writing, they will sign the advisory letter titled Attendance Commitment, which also warns them that failing to meet the requirement will result in an administrative withdrawal. Externship attendance is tracked by sign in sheets which have to be certified by the site supervisor and externship coordinator.

In case of absences, the student will be responsible for make-up of the work presented or required in class.

#### TARDIES AND EARLY DEPARTURES

Mech-Tech expects students to be in class on time. When you arrive late to class you not only miss the material that has been presented, but you disrupt both the instructor and your fellow students. When a student is tardy or leaves early, the teacher shall record the tardiness or early departure from the classroom in the attendance record. The time incurred in tardiness or early departure shall be deducted from class time, rounded to the nearest quarter of an hour and every four quarters will be equal to one absence. (Example: a student arrived 15 minutes late four times, that is equal to a one-hour absence.)

#### ACCEPTABLE (JUSTIFIABLE) ABSENCES

The Institution considers the following to be justified absences:

Student's illness,

- Unforseen accidents,
- Serious illness or death of a member of the immediate family,
- Circumstances beyond the student's control, and
- Extra hours at work or training hours for a pre-determined period of time
- Court or government agency appointment

What is previously mentioned IS NOT an exemption for the student to comply with the minimum 80% attendance required for graduation. Remember, the 80% of attendance is an absolute requirement; even when there are absences that can be justifiable, cumulative attendance for graduation can never be below 80%. All students who are absent to class must present evidence that will be evaluated by the Attendance Coordinator, Counselor, or an authorized school representative. The absences considered *due to circumstances beyond the student's control* will be evaluated individually by personnel from the Vice Presidency of Student Affairs and it will be determined if it is justifiable enough to assign the make-up work.

## **CONSECUTIVE ABSENCES – (14-day Policy)**

A student who is absent for fourteen (14) calendar days without justification, can be **administratively** withdrawn. Calendar days include weekends and holidays as well as class days.

Students who are absent to class must be justified within a period no greater than three (3) days after the date of the absence.

#### CONSEQUENCES OF NOT MEETING ATTENDANCE REQUIREMENT

Since cumulative attendance is monitored at the end of every term, an advisory letter titled Attendance Commitment will be issued to any student with a percentage of attendance that is below 80%. In case that a student does not meet the minimum 80% required, will be evaluated before processing his/her enrollment, will enter an orientation process, and will sign an Attendance Commitment with a specific plan that will be monitored periodically by the Vice Presidency of Student Affairs. After exhausting all reasonable efforts, if the student does not comply with the minimum attendance requirement, he/she will be administratively withdrawn (terminated). If as part of the enrollment process for students going to the last term, it is determined by the Registrar that a student has no foreseeable possibility of meeting the cumulative 80% of attendance requirement upon completion of the program, this will be communicated to the student in writing because it is potential for an administrative withdrawal (termination). An **administrative withdrawal** will be processed to the student.

#### TERMINATIONS DUE TO POOR ATTENDANCE: Impact on Financial Aid

The Registrar's Office will inform the Financial Aid Office of the withdrawals processed within the term required by the United States Department of Education -within 14 calendar days from the last day of attendance.

# **MAKE-UP WORK FOR ABSENCES**

The student will be entirely responsible for making up work due to legitimate absences. The instructor will provide the student with the work that was given in class so that the student can complete the task and make-up for the time lost. The student will have until the twelfth week of the term for programs measured in quarters and the fifteenth week for semesters, to make up for the absences incurred in such term.

New students, who begin classes during the late enrollment period, will be given the opportunity of providing an assignment as make-up work. The list of students that completed their enrollment in the late period according to the Academic Calendar will be provided to the Counselor or Retention Officer who will work the orders for make-up work, as applicable.

#### **EXCEPTIONS**

When the academic calendar issued by the Office of the Vice-President of Education has an academic recess of five (5) school days or more, the date of determination will be when the student complies with the 14 days after the last day of attendance without counting the academic recess. In case that the student notifies the Institution his/her desire of not returning to class, after providing orientation to the student regarding the Withdrawals Policy, the Registrar's Office will process the withdrawal immediately.

#### LEAVE OF ABSENCE

Students have the right to apply for a leave from studies in cases of emergencies, illness or due to maternity. The leave application shall be submitted to the Registrar's Office with the medical documentation that applies. The leave of absence cannot exceed 180 days or more than half the program length (for programs of study which length is less than a year), whichever is shorter. Leaves will not be authorized beyond the ending date of the term unless the case requires it, and it is previously authorized by the Director. In the event that the student does not show up for class upon the termination of his/her leave, he/she will be processed and as an administrative withdrawal.

The procedure to request a Leave of Absence (LOA) is:

- The student must complete and hand-in the application provided by the Registrar's Office.
- The student must provide evidence that supports the reason to request a LOA and that it is related to the information provided in the application.
- Specify the date in which the student wishes to return to classes.
- The application will be evaluated by the Registrar and the Director and the decision will be notified to the student.
- The student is then referred to the Financial Aid and Finance Offices for individualized orientation.

There are no financial consequences for the student during and after the LOA.

If the student is veteran or a beneficiary, he/she will be withdrawn from the study during the leave of absence; upon his/her return, the study benefit will be reinstated.

If a student receives notification that he/she has been activated by the United States Military Service and/or the National Guard, he/she must notify it to the Registrar's Office in advance and provide evidence accordingly. The Registration Officer will provide an orientation regarding: enrollment cancellation, academic progress, enrollment costs, and reasonable placement; among others. The student will be responsible of informing at the beginning of each term that he/she is a member of the military.

For Veteran students at Mech-Tech Institute, who for any reason miss more than 20% of the total

scheduled course hours in a calendar month, are considered to be in violation of the attendance policy. The student will be placed on attendance probation for one (1) month for unsatisfactory attendance. In order to show that the cause of unsatisfactory attendance has been removed, students must show good attendance (as defined) for one calendar month afterwards. If the student fails to meet attendance standards the following month, he/she will be terminated from their VA education benefits for unsatisfactory attendance. The LDA that will be reported to VA is the day before the student missed more than 20% of this scheduled hours while on probation

#### 5.2.4 Withdrawals

The Institution will apply the Refund Policy to those students who interrupt their studies or are expelled.

A student, with satisfactory progress at the time he/she is expelled, may apply for reenrollment and will be considered to continue his/her studies.

A student, who does not meet satisfactory progress at the time he/she is expelled, will be placed on probation for a period of one (1) quarter whenever he/she is accepted for reenrollment. This readmission will be submitted to the Admissions Office and must be approved by the Registrar.

For veteran students and their beneficiaries, the effective date of a withdrawal, license for illness, military license, etc., will be the last day of attendance.

#### 5.2.4.1 Voluntary Withdrawals

A student can withdraw at any time and must receive the approval of: the Registrar Office, the Finance Office, the Financial Aid Office, Counseling, and the instructors. He/she must turn in the withdrawal form in the Registrar's Office, where the withdrawal will be made official, and it will be kept in the student's academic file with a W (Full Withdrawal).

#### **5.2.4.2** Administrative Withdrawals

Administrative withdrawal is an action taken by the Registrar Office to process a withdrawal to a student who does not comply with institutional rules, policies, and procedures after all resources are used in order for the student to normalize his/her situation. Administrative withdrawals apply to the following cases:

- Financial debt with the Institution
- Consecutive unjustified absences
- Breach of contract
- Unsatisfactory Academic Progress (Attendance / Average)
- Breach of the probation status in the case of academic progress
- Improper behavior towards faculty or administration members, students and/or visitors
- Inconformity with the Institution's rules and requirements
- Health problems

#### 5.2.5 Termination of Studies

A student will terminate his/her studies when:

- He/she finishes the total of academic credits, according to the program and contract
- Upon voluntarily withdrawing
- Upon being administratively withdrawn or expelled
- If the student fails to comply with the conduct policies established by the Institution or he/she is submitted to expulsion

## **5.2.6** Graduation Requirements

#### **5.2.6.1** Technical Programs

- In order to complete or graduate from a program the student must have a minimum standard of attendance of 80%.
- Complete the total of credits in their study program with a cumulative grade point average of 70% (C) and must have maintained satisfactory academic progress.
- Must have filled out all the documents required by the Institution.
- Pay the graduation fee to assist to the Graduation

In order to receive a diploma, credit transcript, studies certification and/or any official document from our Institution, a student **must not be in financial debt with the Institution.** 

During the graduation ceremony, a symbolic diploma is handed to students. This ceremony is carried out once a year.

#### **5.2.6.2** Associate Degree Programs

Associate Degree programs are not offered in Mech-Tech Institute of Orlando, Florida. All graduation candidates must meet the requirements established by the Institution. The following requirements have been established:

- Submit a Graduation Application to the Registrar's Office on the dates set forth on the Academic Calendar during the last Quarter of their studies for an evaluation of credits.
- In order to complete or graduate from a program the student must have a minimum standard of attendance of 80%.
- Successfully pass the total of credits in their study program with a general grade point average (both general and for graduation) of 2.00 or 70% (C) in the maximum time stipulated in the Institution's Satisfactory Academic Progress Policy.
- Pay the graduation fee.

In order to receive a diploma, credit transcript, studies certification and/or any official document from our Institution, a student **must not be in financial debt with the Institution.** 

During the graduation ceremony, a symbolic diploma is handed to the students. This ceremony is carried out once a year.

Veteran students and their beneficiaries must complete their program of studies in its regular time. A student who extends the regular time of the program cannot continue to receive Veterans benefits; on the contrary, if the student receives financial aid (Pell Grant), this will not affect his/her Pell Grant benefits and can benefit from the .50% additional time stipulated in the Title IV regulations. The participant must be evaluated by using the veterans and Pell Grant criteria if the student benefits from it.

## 5.2.7 Academic Affairs

#### 5.2.7.1 Definition of Academic Year

The Institution's academic calendar is divided in four twelve-weeks terms (3 months). At the present time, the Institution divides the calendar in the following manner:

A. Programs of study are divided in quarters with a minimum length of 10 weeks and a maximum of 13 weeks per quarter.

The Federal Government defines the academic year as: "A time period of 36 weeks in which a student is expected to complete at least 36 credit hours in a technical program."

Based on this, the Institution defines its academic year as one of 36 consecutive weeks. All students are expected to study for three consecutive quarters according to the program they selected to complete one academic year, for purposes of Financial Aid, and may be entitled to the disbursement of the total aid granted for that academic year, according to their academic load, if they meet all other eligibility requirements.

#### 5.2.7.2 Unit of Credit

The unit of credit used is the credit hour. One contact hour lasts for 50 minutes during a 60-minute hour. The institutional policy is to provide ten (10) minutes of break after each fifty (50) minutes of class and twenty (20) minutes of break after one hundred (100) minutes of class.

For programs in quarter credits: 1 credit = 20 hours of conference, laboratory, and/or practice.

The same conversion applies to the Occupationa Laboratory Experience and Practice in the Industry courses.

#### 5.2.7.3 Academic Load

A student's regular academic load is 12 credits. Extraordinary cases must have the approval of the Dean or Director. In the event that the student changes his/her academic load, his/her satisfactory academic progress will be evaluated individually.

For each course the student will accrue the value in credits that the course has assigned.

A student who wishes to exceed the number of credits established in his/her program of studies must have the Registrar's permission.

The amount of matriculated credits in one academic term (quarter) can be:

Academic Load	Credits
Full-Time	12
Three fourths of the time	9-11
Half of the time	6-8
Less than half of the time	1-5

#### 5.2.7.4 Length of the Programs of Study

Technical courses offered by the Institution range from 12 credits (12 weeks) up to 60 credits (60 weeks). The Associate Degree Programs range from 12 credits (12 weeks) up to 90 credits (90 weeks).

#### 5.2.7.5 Language of Instruction

The official language of instruction in Puerto Rico is Spanish. The official language of instruction for Mech-Tech Institute of Orlando, Florida are English and Spanish (Bilingual). Completing a program in a language other than English, may reduce employability where English is required.

#### 5.2.7.6 Number of Students per Group

The number of students per group varies depending on the subject to be taught, physical facilities, methodology to be used, available equipment, and the instructor's abilities. Groups are organized in the following manner: academic courses, from 20 to 30 students; laboratory courses, from 15 to 20 students.

# 5.2.7.7 Grading System

The system for evaluating academic work performed by the students, in workshops, practice or laboratory is based on percentage (%) and is expressed according to the following table:

PERCENTAGE	DESCRIPTION	=	GRADE
100 - 90	Excellent	=	A
89 - 80	Good	=	В
79 - 70	Average	=	$\mathbf{C}$
69 - 60	Deficient	=	D
59 - 0	Failed	=	${f F}$

Grades for transferred courses are not considered when calculating the student's general grade point average. Upon the end of each term, the instructors will hand-in

the grades report to the Registrar's Office who will hand it in to the students.

#### **5.2.7.8** Selection of Courses

The Institution recommends following the curricular sequence, which is presented in each program's curriculum. In addition, the pre-requisites must be strictly followed in the order established. At the time a student enrolls for each term, a sequence is already set-up and selected.

#### 5.2.7.9 Enrollment and Class Program Changes

The Institution's Academic Calendar provides the enrollment process dates. Students who require program changes will be allowed to do this during the changes and late enrollment period.

Students, who need a change in sessions after enrolling, must request it to the Registrar's Office where the case will be evaluated and a course of action will be recommended. The Registrar is the only person authorized to make changes in student schedules and class programs.

#### 5.2.7.10 Grades

The Institution's grading system is the following, in which alternate grades are established for particular situations:

Grade	Equivalence	Value
I	Incomplete	Does not affect the average or percentage until it is removed.
P	Passed	Value in credits – without affecting average.
NP	Not Passed	Must be repeated, does not affect the average, neither does it affect the percentage of credit hours attempted and passed.
WA	Administrative Withdrawal	Withdrawal - affects the percentage of credit hours attempted and passed.
W	Official Withdrawal	Withdrawal - affects the percentage of credit hours attempted and passed as well as Satisfactory Academic Progress
Т	Transfer	Does not affect the general average or graduation average. Not taken into account for Satisfactory  Academic Progress.
R	Repeated	Next to a grade indicates a repeated course.
NR	Never attended	Student did not attend class. Partial cancellation; does not affect the percentage of attempted and passed credits.

#### **5.2.7.10.1 Definition of Grades**

✓ I - INCOMPLETE - This is given when in the professor's judgment there is justification for which the student was unable to complete all course requirements. The professor shall calculate the grade, which the student had up to that time and will allocate 0 to the missing requirement. S/he shall report "I" to the Registrar and next to the grade. The student must officially apply for the incomplete removal in

the Registrar's Office, shall pay the corresponding charges and fill out the form. Removal of an incomplete is the student's responsibility. The student must request the removal two weeks after the end of the term or academic period except in extraordinary cases where the student has a justified cause. She/he shall coordinate the removal with the professor, after paying the fee. Failure to comply with this procedure will result in the final awarding of the grade.

- ✓ P- PASSED Given in those cases in which the course does not require a grade. Carries academic credits, but does not affect the computation of the grade point average. Courses accredited on the basis of experience [or] passed through the Challenge Exam are also graded "P"
- ✓ NP-NOT PASSED Given in those cases in which the student does not pass the requirements of a course for which the grade is Passed or Not Passed.
- ✓ W- OFFICIAL WITHDRAWAL Given in a course from which the student files for an official withdrawal.
- ✓ WA ADMINISTRATIVE WITHDRAWAL given to students who have excessive absences, disciplinary sanctions or other reasons.
- ✓ **R REPEATED** Next to a grade indicates a repeated course.
- ✓ T TRANSFER Given in those cases in which the course has been validated by transfer and does not require a grade. Carries academic credits, but does not affect the computation of the grade point average. Courses accredited by transfer are graded "T".
- ✓ **NR NEVER ATTENDED –** Given in cases when the student never reported to class. It is a partial cancellation and affects the percentage of attempted and approved credits.

# 5.2.7.11 Claims Regarding Grades

A student who feels that an error was committed in the grading of a course may ascertain the same by following the proper process. The student must present a claim within two weeks after receiving the grades.

- The student shall ascertain the grades reported by the instructor with the Registrar's Office.
- The student will request to the Registrar's Office the Grades Revision form and will make the corresponding payment in the Collections Office. The instructor will revise his/her records and will confirm in the form if there was an error and if there is an adjustment to the grade.
- Should the error be confirmed, the instructor shall report this through the grade change form. The form shall be submitted to the Registrar's Office through the Dean or Director for the corresponding process.

# 5.2.7.12 Grade Change

An instructor, who commits an involuntary error in awarding a grade to a student, must submit the grade change form to the Registrar's Office with the respective justification and the signature of the Dean or Director. The process must take effect before the closing of the immediate quarter for which it was granted.

## **5.2.7.13** Repeated Courses

Courses graded with (F) or (NP) have to be repeated. When repeating a course, the highest grade will be the one used in the computation of the Grade Point Average; nevertheless, the lowest grade remains in the academic file with the indication that it was repeated (R). The student is entitled to cover the cost of the courses through federal funds only once. In cases in which they are taken for the third time, the student will have to defray the cost of the course.

#### 5.2.8 Satisfactory Academic Progress

To comply with Satisfactory Academic Progress (SAP) in Mech Tech College, the student must comply with minimum standards to satisfactorily complete the program of study while being matriculated. The Institution requires that the student satisfactorily completes all courses to be able to graduate from the academic program with an average or academic percentage equivalent or higher than "C" (70% or 2.00). The academic progress rules apply to all full-time or part-time students matriculated in regular programs and are evaluated cumulatively during all the periods attended in the Institution. The students are notified of their academic progress upon completing each academic period.

#### **Satisfactory Academic Progress Policy**

Mech-Tech College requires that all students comply with a minimum requirement for Satisfactory Academic Progress (SAP). To measure this progress, the Institution has established minimum parameters for each program of study based on:

- The normal length of the study program.
- The maximum length of the study program which is 1.5 times the normal length.
- Quantitative and cumulative Satisfactory Academic Progress shown by the student's grade point average per term.
- Quantitative Satisfactory Academic Progress of the academic load registered per quarter, showing an increase in the credits approved by the student.

To complete this evaluation, we have developed tables that establish the minimum requirements and percentage of credits and accumulated grade point average for each program.

The academic programs are divided based on the number of credits required and the length. The academic work of each student will be evaluated cumulatively against the standards on the tables by following the process described below:

- a) An evaluation table will be maintained in each student's record which registers his/her Satisfactory Academic Progress for each term
- b) Credits attempted will be considered all of those that the student has matriculated in no matter if they are classified as: W = Total Withdrawal; WA = Administrative Withdrawal, and F = Failed
- c) The *DiamondD* database provides an academic progress calculation form for each regular student

- d) For students with credits transferred, failed, and/or repeated, a manual evaluation is done each term which is also maintained in the student's record
- e) Students who do not comply with SAP will be notified in writing and an appointment will be provided with the purpose of explaining the Policy and its processes and the consequences for not complying again with SAP. The following process is followed:
  - a. The student is oriented and placed on Academic Warning
  - b. A written notification is given; the student signs the notification which is filed in his/her record
  - c. A probation *Warning* is placed in the electronic record and the warning period is entered
    - i. During the Academic Warning period, the student must improve his/her attendance and grades and must show interest in his/her studies
    - ii. Support will be provided through tutoring, if so requested, in addition to follow-up from the Counseling Office
  - d. Upon completing the Probation/Warning, attendance and grades are evaluated to determine if the student meets the standards of the Progress table; if it is determined that he/she does not comply, an Administrative Withdrawal will be processed.

This Policy also applies to Veteran students and their beneficiaries. The Veterans Administration offers benefits only to study the required courses of the program in which the Veteran is matriculated.

Please refer to the following Satisfactory Academic Progress tables:

# EVALUATION TABLE FOR SATISFACTORY ACADEMIC PROGRESS 36 CREDITS PROGRAM (36 CREDITS PROGRAM and 3 TERMS - MAXIMUM 54 CREDITS and 4 TERMS)

Evaluation Period	First Evaluation	Second Evaluation	Third Evaluation	Fourth Evaluation
Attempted credits	12 cds	24 cds	36 cds	48 cds
The student must approve minimum of credits	70%	80%	90%	100%
With a minimum accumulated of	60%	70%	70%	70%

EVALUATION TABLE FOR SATISFACTORY ACADEMIC PROGRESS (48 CREDITS PROGRAM - 4 TERMS MAXIMUM 6 TERMS – 72 CREDITS)

Evaluation Period	First Evaluation	Second Evaluation			Fifth Evaluation	Sixth Evaluation	
Attempted credits	12 credits	24 credits	36 credits	48 credits	60 credits	72 credits	
The student must approve minimum of credits	40% 4 credits	50% 12 credits	65% 23 credits	75% 36 credits	80% 38 credits	100% 48 credits	
With a minimum accumulated of	60%	63%	70%	70%	70%	70%	

# EVALUATION TABLE FOR SATISFACTORY ACADEMIC PROGRESS (60 CREDITS PROGRAM - 5 TERMS MAXIMUM 7 TERMS – 90 CREDITS)

Evaluation Period	First	Second	Third	Fourth	Fifth	Sixth	Seventh
	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation
Attempted credits	12 credits	24 credits	36 credits	48 credits	60 credits	72 credits	90 credits
The student must approve minimum of credits	40%	50%	65%	75%	80%	90%	100%
	4	12	23	36	48	54	60
	credits	credits	credits	credits	credits	credits	credits
With a minimum accumulated of	60%	63%	65%	70%	70%	70%	70%

# EVALUATION TABLE FOR SATISFACTORY ACADEMIC PROGRESS FOR ASSOCIATE DEGREE OFFERINGS (90 CREDITS PROGRAM - 8 TERMS MAXIMUM 12 TERMS – 135 CREDITS)

Evaluation Period	First Evaluation	Second Evaluation	Third Evaluation	Fourth Evaluation	Fifth Evaluation	Sixth	Seventh Evaluation	Eighth Fyelustion	Ninth Evaluation	Tenth Fvaluation	Eleventh Evaluation	Twelfth Evaluation
Attempted credits	12	24	36	48	60	72	84	90	102	114	126	135
The student must approve minimum of credits	40% 4	50% 12	65% 23	75% 36	80% 48	90% 64	90% 79	90% 81	95% 85	95% 85	95% 85	100% 90
With a minimum grade point average of	1.00	1.15	1.15	1.25	1.25	1.25	2.00	2.00	2.00	2.00	2.00	2.00

# **HEALTH PROGRAMS**

# **Evaluation Tables for Satisfactory Academic Progress**

# ASSOCIATE DEGREE IN DENTAL ASSISTING WITH EXPANDED FUNCTIONS (84 CREDITS PROGRAM 6 TERMS MAXIMUM 9 TERMS – 130 CREDITS)

Evaluation Period	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth
	Evaluatino	Evaluation							
Attempted credits	14	29	43	55	71	87	103	118	130
The student must approve minimum	40%	50%	65%	75%	80%	90%	95%	100%	100%
	5	14	27	41	56	78	87	87	87

of credits									
With a minimum grade point average of	1.00	1.15	1.25	2.00	2.00	2.00	2.00	2.00	2.00

#### **5.2.8.1** Warning

If a student does not comply with Satisfactory Academic Progress during an academic term, he/she will placed in *Warning* during the next academic program. The student will receive orientation and will be notified in writing. During this period, the student will be monitored by the Counseling Office and will be provided tutoring to improve his/her academic deficiencies. Upon completing the Warning period, the student will be reevaluated to determine if he/she complies with Satisfactory Academic Progress.

If when completing the academic term the student still does not comply with Satisfactory Academic Progress, he/she will be withdrawn from the Institution.

# **5.2.8.2** Appeals Process

If the student does not comply but expresses interest in continuing studies, he/she will be evaluated by a committee to determine the possibility of continuing studies. If evaluated positively, the student is placed on Probation with an Academic Plan and is guided throughout the process. If the student does not comply upon completing this period, he/she will be administratively withdrawn.

A student, who after completing the Warning period, has been withdrawn for not complying with SAP, will have the right to appeal such determination. The student must submit the appeal in writing (the form will be provided) to the Registrar's Office together with the documentation that supports the appeal. The appeal must be received within two (2) work days from the date of the notification. An Appeals Committee will meet within three (3) work days from receiving the appeal. The committee will be composed of the Counselor, a Registration Officer, and an instructor, and all mitigating circumstances presented will be evaluated; among these:

- 1. Prolonged illness
- 2. Physical impairment or temporary mental condition that does not allow the student to move
- 3. Student and/or family member's illness that does not allow satisfactory learning
- 4. Death in the family, a spouse and/or tutor
- 5. Drastic change in the financial situation of the family
- 6. Divorce of the parents and/or the student
- 7. Drastic personal problems of which the student has no control
- 8. Military License

A decision regarding the request will be communicated in writing. If the request is approved, the student will be placed on a Probation period and can continue to receive financial aid during the term.

#### Reinstatement

If the student was withdrawn due to not complying with the Satisfactory Academic Progress Policy and he/she notifies the Institution of his/her desire to be reinstalled, he/she can request it through a Re-Entry Application. For the student to be reinstalled in the Institution, he/she must be interviewed by the Counselor who will evaluate the student's desire to continue his/her education and a committee will be called to determine the student's academic ability of progressing in the program again. If the student is reinstalled, he/she will be classified under Probation for one (1) academic term and will be evaluated in the next evaluation period to determine his/her new Progress status.

#### 5.2.8.3 Probation Period

A student that did not comply with Satisfactory Academic Progress and his/her appeal is approved, will be placed on probation with an Academic Plan for his next academic term and will be notified in writing. If upon completion of the probation it is determined that the student did not comply with Satisfactory Academic Progress or did not comply with the Academic Plan, the student will be withdrawn from the Institution. If on the contrary, upon completing the evaluation period of the student's probation the student achieves Satisfactory Academic Progress and/or complies with the Academic Plan, the probation will be withdrawn; nevertheless, the student will continue with the established academic plan until completing his/her academic program. While a student is on probation, he/she is considered as complying with Satisfactory Academic Progress and will be eligible for Title IV funds.

#### **Academic Plan**

A student who appeals after a Warning period and such appeal is approved, will receive an Academic Plan according to the availability of courses and must approve it to be in compliance. The student will be evaluated during each academic term by the Counselor.

#### 5.2.8.4 Student Withdrawal by the Institution

If after a Probation period the student does not comply with Satisfactory Academic Progress and does not submit and appeal or such appeal is denied, he/she will be withdrawm from the Institution as well as a student who does not comply with the Academic Plan established as consequence of an appeal.

#### 5.2.8.5 Repeated Courses

The Institution has established the policy that any student, who obtains a deficient grade in a given course of his/her study program, will have the opportunity to repeat the course using Title IV funds up to two (2) times. Those students, who obtain a grade that is not satisfactory, will have the opportunity of repeating it once (1). After repeating the course, the higher grade will prevail, and Title IV funds can also be used for this purpose. If a third (3) time occurs, it is the student's

responsibility to pay for the course. Course repetition will depend on the availability of the courses offered by the Institution.

The Veterans Administration will not pay for previously approved courses; only for failed ones ("F" and "NP"). The concentration courses where a minimum approval grade is required will be the only ones that the Veterans Administration will pay for their repetition.

#### 5.2.9 Student Conduct

Each student in the Institution has education and learning rights. This transcends the classroom and encompasses his/her possible relationships and experiences with classmates, instructors, personnel and the community in general. The student's fundamental duty consists of exercising his/her academic rights, and to behave in such a way that his/her conduct will not harm other members of the institutional community. Disciplinary actions may take effect regarding student conduct; if a student does not agree with the action taken, he/she has the right to an appeal. At all times, the student will follow the rules and procedures established in the Students' Handbook.

## 5.2.10 Students' Right to Review Records

Our students have the right to examine all of their academic files or records kept by the Institution, notifying the Office of the President in writing at least ten (10) days before the proposed date of examination. If a student disagrees with any information or document in the student's file, the student has a right to express his or her opinion regarding the information or document at least within ten (10) days of the date on which the file was examined. In this case the student shall notify comments in writing to Office of the Registrar expressing the reasons for disagreeing with the information in his or her file. The Institution will answer the student within ten (10) days after receiving notification from the student. All relevant documentation will be kept in the student's file.

#### **5.2.10.1** Confidentiality of Documents

The United States Congress enacted legislation that is applicable to all institutions that receive federal funds, the Family Educational Rights and Privacy Act of 1974 and the Buckley amendments, establishing students' rights to privacy of the files kept by educational institutions.

- To who the information may be disclosed
- The kind of information that may be disclosed

Under the law, the institution may only provide information and access to such files without authorization by the student only to the following:

- 1. Officers of the Institution with a legitimate educational interest {34 CFR 99.31(a)(1)}. The criteria for determining who are considered officers of the Institution, and who are considered to have "a legitimate educational interest" are in 34 CFR 99.7(a)(3)(iii).
- 2. Exceptions (no prior consent required) to provide access to the records are the following:

- a) Parents of dependent students as defined in the ISIR (if claimed on income tax returns) {34 CFR 99.31(a)(8)}, whether or not the parent has custody.
- b) Auditors that have been duly contracted by the Institution, who must sign the document in appendix # every time a file or record is reviewed.
- c) Representatives of the accrediting agency in formal accreditation/re-accreditation visits.
- d) Officers of the Federal Department of Education
- e) Marshals with a court order.
- f) A court order to provide information or testimony in court.
- g) Officers designated by the Office of the Inspector General (OIG).
- h) A student's information may be provided to the Office of the Ombudsman without prior consent in the course of addressing a complaint made by the student regarding a student loan under Title IV programs.
- A student's information may be provided to the state attorneys if the student is accused of submitting false information to obtain state financial aid.
- j) The prohibitions of this Law are not focused on individuals but on purposes; therefore, if it is a matter of an investigation or prosecution of a person suspected of a crime, such as terrorism, then, information may be divulged without the student's consent (or the parents, if applicable).

#### **5.2.11** Complaints or Grievances

Students are free to file a complaint or grievance with the Administration regarding situations that they feel are affecting their ability to carry out their studies. This can be presented verbally or in writing to the Institution's Counselor or Occupational Director. Once presented, the Vice-President of Student Affairs will conduct an immediate investigation and will inform the grievant of the findings and action to be taken. The Institution has ways to facilitate the filing of complaints or grievances by students.

The Institution has several forms to facilitate the complaints and/or grievance process of students. If for any reason, students do not agree with an action taken by the Institution when solving a presented matter, they can contact the Accrediting Agency, ACCET at: *Accrediting Council for Continuing Education and Training* (ACCET), 1722 N Street NW, Washington, DC 20036, número de teléfono (202) 955-1113.

For Mech-Tech Institute of Orlando, Florida, students are instructed to contact the Accrediting Agency at: Accrediting Council for Continuing Education and Training (ACCET), a: 1722 N Street NW, Washington, DC 20036 and/or by calling (202) 955-1113; in addition, they may contact the Licensing Agency: Comission for Independent Education (CIE) a: 325 W. Gaines Street, Ste. 1414 Tallahassee, Florida 32399-0400; with phone number (888) 224-0084.

#### 5.3 FINANCIAL AID OFFICE

The Financial Aid Office facilitates students' financial alternatives that can help them defray their education costs. Financial Aid staff at MTI offers service in Spanish and English.

MTC/MTI administers different programs of federal aids and grants financial aid benefits within the limits established by the source of funds, to students who meet the requirements established to obtain such aid. The eligibility of the financial aid applicants is revised on an annual basis.

The "Free Application for Federal Student Aid" (FAFSA) is obtained at no cost and can be completed through the web page <a href="www.fafsa.ed.gov">www.fafsa.ed.gov</a>. MTC/MTI's code is 030255.

The Institution will use the application results to grant additional financial aid of federal, local, and institutional funds to eligible students. The application to this program is essential for the student to be considered to receive additional financial aids.

# 5.3.1 Financial Aid Programs

At our Institution students receive financial aid under Title IV of the US Department of Education, if eligible.

✓ **Federal Pell Grant-** This program was established by the US Department of Education as the keystone of the financial aid programs for undergraduate students who do not have a bachelor's degree or its equivalent or a first professional degree. This grant provides funds that do not have to be reimbursed by the student. The eligibility of the student is determined by a uniform formula which treats all applicants consistently.

The results of the FAFSA (Free Application for Federal Student Aid) are received electronically in the Institution and determine students' eligibility. If the grant application is received for verification, the student must provide additional information, as requested.

The Financial Aid Office at the Institution is available to answer questions that the students may have regarding their financial aid. Once a student has received orientation on financial aid services, it is his/her responsibility to take the necessary steps to apply for the aid. The payment is then accredited to the student's account (subsidiary) at the Institution.

It is the student's discretion to visit the Financial Aid Office for orientation and guidance on how to fill out the application.

The FAFSA can be submitted through:

• The branch campus (sends electronic application by using EDExpress – If you are a new enrollment student and wish for the branch campus to send the application electronically, you must visit the Financial Aid Office of the branch campus you are interested in studying at and present income evidence of the two fiscal years prior to the year in which you are applying for Financial Aid; both the student's and their parents', if applicable. For example, if applying for the year 2018-2019, you must present income evidence for the fiscal year 2016. This is performed in those cases where an unusual situation arises. For example: when an "override" is conducted, the

applicant or the parents are experiencing difficulties with signing their FAFSA electronically.

• Through the Internet by using the FAFSA on the web – The webpage of the United States Department of Education is free-of-charge; you can use it to fill out the FAFSA online and send it through the internet. You can access the FAFSA on the web by using a computer with internet access. The webpage address is: <a href="http://www.fafsa.gov/">http://www.fafsa.gov/</a>.

Upon accessing the FAFSA on the web, you can provide your information directly to the Central Processing System (or CPS) of the United States Department of Education who will process the request within 72 hours.

• By downloading the mobile application myStudentAid from the Apple App Store (iOS) Google Play (Android).

In order to download the app by accessing either Google Play or the Apple Store, you may use the following links.

#### Google Play

https://play.google.com/store/apps/details?id=com.fsa.mystudentaid

#### Apple App Store

https://itunes.apple.com/us/app/mystudentaid/id1414539145

Any student transferring from other postsecondary institution(s) will have his or her financial record retrieved from either NSLDS or COD with the purpose of determining the amounts of grant for which he or she is eligible for the current year.

✓ Federal Supplementary Educational Opportunity Grant (FSEOG) – This Federal program provides additional money through grants to help undergraduate students. It is a grant that provides money that does not have to be reimbursed by the student and the payment is credited to the student's account at the Institution.

Availability of funds – the amount that will be assigned to each student will be determined by the institution, in compliance with federal regulation. The amount of aid will not be greater than the student's financial need. The aid disbursed under this program will be primarily used to cover the student's tuition costs.

✓ State's Student Financial Aid Program Administered by the Council on Education of Puerto Rico – Students with Academic Talent Grant (BETA) – The Council on Education of Puerto Rico offers different financial aid programs to students. Currently, our institution takes part in the Students with Academic Talent Grant Program (or BETA, by its Spanish acronym). This Program's purpose is to award financial aid to those eligible students possessing a GPA of 3.00 or greater, evidencing financial need, and enrolled at participating institutions. The aid will supplement all other funds that students will receive through Federal, State, institutional, or other private financial aid programs.

- ✓ Federal Work and Study Program (FWS) Under this program, a student can study and earn money in order to pay for his or her education. The program presents the following features:
  - Allows students to work part-time while studying
  - Helps paying for costs of study
  - Both full-time and half-time students can participate
  - The program promotes, as far as possible, community service as well as jobs related to the student's program of study

The number of hours to be worked will be determined according to the student's financial need, as per the HEA; the student's school schedule and academic performance will be taken into account as well. The wage rate that the student receives through the program will be at least equal to the current Federal minimum wage. FWS wages will be paid once a month.

It is recommended to select the Federal Work-Study option while filling out the Free Application for Federal Student Aid (FAFSA).

- ✓ **Direct Loan** This loan is directed to the student and requires filling out the Free Application for Federal Student Aid (FAFSA). The program consists of Direct Subsidized Loans and Direct Unsubsidized Loans, and the student is responsible for repaying his or her loans. Its purpose is to pay for differences in costs of study not covered by other available aids. The loan can be granted according to a lower or equal amount of unmet need, but never greater. The Institution will examine the results of the application and will inform if it meets the requirements to receive the aid. If the student complies with the criteria, he or she will sign the Master Promissory Note (MPN), a legally binding document that details the conditions under which the student accepts to obtain and repay the loan in its entirety, plus the interests that accrue (Unsubsidized loans) while he or she is still in-school. This loan requires filling out the entrance and exit counseling forms. The total amount of the loan will be divided in equal parts for the academic year for which the student is enrolled and will be deposited in the Institution's account. If a refund towards the student is issued, it will be processed to the student's name through a check in a period no greater than fourteen (14) days. If the student processes a withdrawal or is withdrawn by the Institution, the loan portion of granted funds must be considered when processing R2T4; this is done in the same way that funds granted by FSEOG/PELL are processed. All students who wish to request this loan will be provided with a detailed and explicit orientation regarding their obligation to repay the loan, the current interest rates, and the available repayment options. This orientation will be provided to the student by the Financial Aid Office.
- ✓ **Direct Plus Loan** This loan is offered to parents of dependent students and it will be issued under the parents' name. Filling out a Free Application for Federal Student Aid (FAFSA) is required. Its purpose is that parents can pay for the differences in costs of study not covered by other available aids. The loan can be granted according to a lower or equal amount of unmet need, but never greater. To issue this loan, there is a waiting period of thirty (30) days prior to its disbursement. The loan does not require filling out the entrance and exit counseling forms, but is subject to both credit approval and submission of the "Master Promissory Note" (MPN) instead. The total amount of the loan will be divided in equal parts for the academic year for which the student is enrolled and will be

credited to the Institution's account. If there is any refund, it will be issued under the parent's name through a check in a period not greater than fourteen (14) days. If the student processes a withdrawal or is withdrawn by the Institution, the loan portion of granted funds must be considered when processing R2T4; this is done in the same way that funds granted by FSEOG/PELL are processed. A parent who wishes to apply for a PLUS Loan will be provided a detailed and clear orientation regarding their obligation to repay the loan, the current interest rates, and the available repayment options. This orientation will be provided to the student and/or parents by the Financial Aid Office. Parents and students will be informed that this kind of loan enters repayment after sixty (60) days of receiving the last disbursement for the academic year.

- ✓ **Institutional Grants** The Institution offers institutional grants to the following candidates in its campuses in Puerto Rico; institutional grants are not offered in Mech-Tech Institute of Orlando, Florida:
  - 1. Sons/daughters of automotive technicians who are soon to be retired which will allow automotive technicians' services to continue operating.
  - 2. Institution's employees.
  - 3. Sons/daughters of the institution's employees.
  - 4. Worth cases of students from the Institution.

Procedure for granting the aid:

- a. Candidates will fill out an application and will hand it in to the Finance Office with all the required documents.
- b. The application will be evaluated by the Institutional Grant Committee.
- c. The list of qualifying candidates will be given to the President.

The institutional grant will be in terms of attendance of study payments. The Institutional Grant Committee will be responsible of choosing the participants. The quantity of grants and amount granted will depend of the financial resources available in the Institution.

If the student withdraws, he/she loses eligibility of receiving the institutional grant again if he/she applies for readmission. Students who are in delinquency of student loans will lose their eligibility automatically and will be responsible of the total amount of the debt. The percentage of institutional aid will be granted to cover for enrollment costs not covered by other aids.

Grants Committee: Edwin Colón, José Algorri, Dolores Galarza, Agüilda Gómez

For additional information regarding the aids available at our Institution, please visit our Financial Aid Office located in any of our branch campuses.

#### **5.3.2** Veterans and Other Beneficiaries from Federal Programs

Veteran students or beneficiaries of Veteran Administration Programs will receive benefits if they complete their study programs at the regular time stipulated in the catalog. In case they exceed, they loose eligibility for these benefits under Title 38. However, they can be eligible for financial aid under Title IV (Pell Grants and others) if they meet the corresponding requirements.

#### **5.3.3** Housing and Transportation

MTC/MTI does not provide students housing or transportation services. Nevertheless, the Institution's facilities are located in easy-access area for both services.

#### 5.4 FINANCE OFFICE (COLLECTIONS)

The main purpose of the Finance Office is to collect the money billed to students for enrollments, fees and other related charges not covered by the financial aids opportunities recognized and accepted by the Institution as describe under Section 5.3 of this Catalog. MTC/MTI accepts the following payment methods:

- Cash
- Money Orders
- Popular Bank of PR Payment Booklet (only in Puerto Rico)
- ATH (only in Puerto Rico)
- VISA
- Master Card
- Debit Card

Other payment methods applicable only to Puerto Rico are:

- Vocational Rehabilitation Program
- WIA Program
- Aid for Vocational Rehabilitation Veterans
- Aid for Tuition Assistance Military

During the enrollment process, the student fills out a payment plan in which they pledge to pay, in three (3) installments, the balance not covered by financial aids each term. The dates when these payments shall be made are stipulated in the payment plan. These dates have been chosen in such a way that the student can meet his/her financial obligation one month before the end of the academic term. This is done so that the student has no debt at the time the next enrollment is processed.

The office sends out letters on a monthly basis regarding the balances owed by each student in order to remind them of their balances and of their payments' expiration dates. Any active or inactive student, including re-entry and/or participating of the graduation and who applies for services at the Institution, must keep their account current and cannot have any balance pending before we can proceed to deliver any request for documents.

**Costs of Programs Offered:** 

Programs offered	Credits	Length	Fees	Uniform	Maintenance Fee	Technology Fee	Terms	Total Program Cost
Associate Degree in Automotive Mechanics Technology	90	24	\$90.00	\$150.00	\$360.00	\$360.00	8	\$20,400.00
Associate Degree in Technology in Electrical Engineering	90	24	\$90.00	\$150.00	\$360.00	\$360.00	8	\$20,400.00
Associate Degree in Technology in Mechanical Engineering	90	24	\$90.00	\$150.00	\$360.00	\$360.00	8	\$20,400.00
Associate Degree in Industrial Electromechanical Technology	90	24	\$90.00	\$150.00	\$360.00	\$360.00	8	\$20,400.00
Associate Degree in Biomedical Equipment Repair	90	24	\$90.00	\$150.00	\$360.00	\$360.00	8	\$20,400.00
Advanced Automotive Technology	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Diesel Technology and Advanced Systems	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Technology in Advanced Automatic Transmissions	48	12	\$90.00	\$150.00	\$180.00	\$180.00	4	\$10,824.00
Automotive Mechanics	36	9	\$90.00	\$150.00	\$135.00	\$135.00	3	\$8,178.00
Technology in Industrial Electricity with PLC and Renewable Energy	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Technology in Refrigeration and Air Conditioning	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Technology in Industrial Welding	48	12	\$90.00	\$150.00	\$180.00	\$180.00	4	\$11,400.00
Technology in Marine Mechanics with Electronic Systems	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Technology in Collision and Auto Body Repair	60	15	\$90.00	\$150.00	\$225.00	\$225.00	5	\$13,470.00
Motorcycle Repair and Maintenance	48	12	\$90.00	\$150.00	\$180.00	\$180.00	4	\$ 10,824.00
Technology in Racing Mechanics	48	12	\$90.00	\$150.00	\$180.00	\$180.00	4	\$ 10,968.00
Audiovisual Technology and Security Systems	36	9	\$90.00	\$150.00	\$135.00	\$135.00	3	\$ 8,178.00
Associate Degree in Dental Assistant with Expanded Functions	84	24	\$90.00	N/A	\$315.00	\$315.00	7	\$18,864.00

# Costs of programs for Mech-Tech Institute of Orlando, Florida:

Programs Offered	Credits	Uniforms	HOOC	Duration (months)	Tuition Cost
Automotive Mechanics	48	\$150.00	\$90.00	12	\$18,720.00
Technology in Racing Mechanics	48	\$150.00	\$90.00	12	\$18,720.00
Technology in Welding Mechanics	48	\$150.00	\$90.00	12	\$18,720.00
Technology in Diesel Mechanics	48	\$150.00	\$90.00	12	\$18,720.00

# 5.4.1 Policy regarding changes in Enrollment Costs, Records and Fees required by Students

It is the Institution's policy that if there is an increase in credit costs, it will only affect newly enrolled or those who request a re-entry.

If there are any changes in the registry costs or in the fees required from students, a notification of such changes will be sent before the next enrollment period.

# **5.4.1.1** Fees for Technical Programs

Admission Fee (Non-Refundable)	\$ 40.00
Enrollment Fee	\$ 50.00
Uniform	\$150.00
Cost Per Credit	\$191.00*
Administrative Expenses due to Withdrawal	\$100.00
Readmission	\$ 25.00
I.D. Card	\$ 5.00
Official Transcript	\$ 2.00
Certifications	\$ 1.00
Student Insurance	\$ 10.00
Revision of Grades	\$ 10.00
Graduation Fee	\$ 75.00
Maintenance and Improvement	\$ 45.00
Technology	\$ 45.00
Uniforms	\$150.00
* Industrial Welding and Racing Mechanics	
cost per credit is \$194.00	

# **5.4.1.2** Fees for Associate Degree Programs

Admission Fee (Non-Refundable)	\$ 40.00
Enrollment Fee	\$ 50.00
Uniform	\$150.00
Cost Per Credit	\$194.00
Administrative Expenses due to Withdrawal	\$100.00
Readmission	\$ 25.00
I.D. Card	\$ 5.00
Official Transcript	\$ 2.00

Certifications	\$ 1.00
Student Insurance	\$ 10.00
Removal of Incomplete	\$ 20.00
Graduation Fee	\$ 75.00
Revision of Grades	\$ 10.00
Challenge Test	\$100.00
Maintenance and Improvement	\$ 45.00
Technology	\$ 45.00
Uniforms	\$150.00

The Maintenance and Improvement Fee and the Technology Fee will apply to each term of study.

# **5.4.1.3** Fees for Health programs

Admission Fee (Non-Refundable)	\$ 40.00
Enrollment Fee	\$ 50.00
Cost per Credit	\$194.00
Administrative Expenses due to Withdrawal	\$100.00
Readmission	\$ 25.00
I.D. Card	\$ 5.00
Official Transcript	\$ 2.00
Certifications	\$ 1.00
Student Insurance	\$ 10.00
Removal of Incomplete	\$ 20.00
Graduation Fee	\$ 75.00
Revision of Grades	\$ 10.00
Challenge Test	\$100.00
Maintenance and Improvement	\$ 45.00
Technology	\$ 45.00

# 5.4.1.4 Fees for Mech-Tech Institute of Orlando, Florida

Admission Fee (Non-Refundable)	\$ 40.00
Uniform	\$150.00
Enrollment Cost	\$ 50.00
Cost per Credit	\$385.00
Withdrawal administrative expenses	\$100.00
Readmission	\$ 25.00
I.D. Card	\$ 5.00
Official Transcript	\$ 2.00
Certifications	\$ 1.00
Student Insurance	\$ 10.00
Revision of Grades	\$ 10.00

#### 5.4.2 Books and Materials

The Institution does not provide books or materials to students. Students will be responsible for acquiring textbooks and materials. The estimated cost of books and materials can fluctuate between \$200 and \$400, depending of the program of study and the prevailing market cost.

#### 5.4.3 Cancellation and Refund Policy

The Institution maintains a Cancellation and Refund Policy for Puerto Rico and one for Florida. The Institution's Cancellation and Refund Policy for Puerto Rico is based on that established by the accrediting agency, as follows:

- 1. <u>Rejection of Applicant:</u> When the Institution rejects a student before starting classes, or if a prospective international student has his/her visa application rejected, all monies paid will be fully refunded to the applicant except the \$40.00 admission fee.
- 2. <u>Program Cancellation</u>: If the Institution cancels the program of study on or before starting classes of the corresponding term, all monies paid by the student will be fully refunded.
- 3. Cancellation Prior to the Start of Class or No Show: If the student decides to cancel his/her admission before the first day of classes or never attends class (no-show) during the first week of class, the debt with the Institution will be cancelled, and he/she will only be responsible for the payment of the admission fee. For international students, an institution may retain up to a maximum of \$500.00 for any non-refundable charges. Any additional monies paid will be refunded within 45 days from the first day of class or the day of the cancellation, whichever is earlier.

#### 4. Refund Policy for Withdrawals or Terminations:

- a. Enrolled students that withdraw or are terminated after the first week of class, for the purpose of Refund Policy, the programmed credits to be studied will be calculated until the last day of attendance; plus, an administrative withdrawal fee of \$100.00.
- b. If during the late enrollment process, the student is marked by an instructor(s) as "no show" when the student did not attend one of his/her classes, even though he/she attended other classes, the Registrar's Office will begin a partial cancellation process of the enrollment, and the Finance Office will then proceed to make the required adjustment in the total enrollment cost for that term. The grant payments will be adjusted per the student's final academic load for that term.
- 5. All students must settle their account balance before starting the next enrollment period.
- 6. If for any reason the institution ceases operations, the money that the student or his/her guarantor has paid in excess will be refunded prorated except for the admission fee.
- 7. If a student processes an official withdrawal or is administratively withdrawn (terminated), he/she will be responsible of paying the balance reflected after the withdrawal calculation.

This balance will be notified on or before fifteen (15) days from the date of the withdrawal which will be prorated and will include a withdrawal fee of \$100.00.

#### POLICY FOR UNEARNED TUITITON DUE TO WITHDRAWAL

The institution will use our accrediting agency's (ACCET) policy to determine the amount of unearned tuition due to withdrawal:

- ✓ The refund calculation will be based on the student's last day of attendance (LDA).
- ✓ During the first (1<sup>st</sup>) week of class, tuition charges will not exceed 10 percent (10%) of the stated tuition up to a maximum of \$1,000.00. The institution will consider a partial week as a whole when determining the number of weeks attended or completed by the student.
- ✓ After the first week of class, the financial obligation of the term of study will be subjected to a prorated calculation from the first week until the fifty percent (50%) of the training period, plus an administrative withdrawal fee of \$100.00 (see example).
- ✓ After fifty percent (50%) of the period of financial obligation is completed, the institution may retain the full tuition for that period.

All refunds for concept of credit towards the student will be paid as follows:

- ☐ If the credit is created for Title IV (Pell Grant, Direct Loan, FSEOG) payments, a check will be issued under the student's name within 14 calendar days starting from the date of determination.
- ☐ If the credit is created by other aids or cash payments, a check will be issued to the corresponding agency or the student's name in 30 calendar days starting from the date of determination.
- ☐ The student will have 30 additional business days to claim the check in the Collections Office. If the student does not claim the check, it will be returned to the student by regular mail to the address on record.

#### Calculation formula example for Mech-Tech College, LLC:

Tuition for the Period	=	\$2,382.00
Number of Weeks Student Attended	=	<u>5</u> = 41.7%
Number of Weeks Financially Obligated	=	12
Pro rata Portion Completed	=	41.7%
41.7% of \$2,382.00	=	\$ 993.29
Unearned Tuition due to Withdrawal	=	\$1,388.71
Administrative Fee		\$ 100.00
Owed to the Institution including Withdra	wal Fee	= \$1,488.71

# Calculation formula example for Mech-Tech College, LLC (Associate Degree Programs):

Tuition for the Period	=	\$2,418.00
Number of Weeks Student Attended	=	<u>5</u> = 41.7%
Number of Weeks Financially Obligated	=	12
Pro rata Portion Completed	=	41.7%
41.7% of \$2,418.00	=	\$ 1,008.31
Unearned Tuition due to Withdrawal	=	\$ 1,409.69

Administrative Fee = \$ 100.00 Owed to the Institution including Withdrawal Fee= \$ 1,509.69

#### RETURN OF TITLE IV FUNDS POLICY

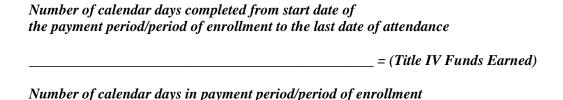
All Institutions participating in Title IV program assistance are required to determine the earned and unearned portions of Title IV aid as of the date the student ceased attendance based on the amount of time the student spent in attendance.

The law specifies how Mech Tech College (Mech-Tech) must determine the amount of Title IV program assistance that you earn if you withdraw from school. For your information, the Title IV programs that are covered by this law are: Federal Pell Grants, TEACH Grants, Stafford Loans (Subsidized and Unsubsidized), PLUS Loans, Federal Supplemental Educational Opportunity Grants (FSEOGs), and Federal Perkins Loans.

The federal policy for "Return of Title IV" require that if a recipient of Title IV assistance withdraws from school during a payment period or period of enrollment in which the recipient began attendance, the school must calculate the amount of Title IV assistance the student did not earn and those funds must be returned. Mech-Tech can define this for you and fully explain which one will be applied because the amount of Title IV assistance that you have earned up to that point is determined by a specific formula.

The amount of Title IV assistance that you have earned is determined on a pro rata basis. For example, if you completed 30% of your payment period or period of enrollment, you earn 30% of the assistance you were originally scheduled to receive. Once you have completed more than 60% of the payment period or period of enrollment, you earn all the assistance that you were scheduled to receive for that period.

Below is an example of the ratio used to calculate earned Title IV program assistance:



If you did not receive all of the funds that you earned, you may be due a Post-withdrawal disbursement. If your Post-withdrawal disbursement includes loan funds, your school must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Mech-Tech may automatically use all or a portion of your Post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with Mech-Tech). Mech-Tech needs your permission to use the Post-withdrawal grant disbursement for all other school charges. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow Mech-Tech to keep the funds to reduce your debt at the school.

There are some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements will be affected. For example, if you are a first-time, first year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any Direct Loan funds that you would have received had you remained enrolled past the 30th day.

If you receive (or your school or parent receive on your behalf) excess Title IV program funds that must be returned, your school must return a portion of the excess equal to the lesser of:

- 1. your institutional charges multiplied by the unearned percentage of your funds, or
- 2. the entire amount of excess funds.

The school must return this amount even if it did not retained this amount of your Title IV program funds. The return of Title IV funds to the US ED is done within 45 days from the date in which the withdrawal is determined.

If your school is not required to return all of the excess funds, you must return the remaining amount.

Any loan funds that you must return, you (or your parent for a PLUS Loan) repay in accordance with the terms of the promissory note, therefore you will make scheduled payments to the holder of the loan over a period of time.

Unearned grant funds, in any amount, that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You do not have to repay a grant overpayment if the original amount of the overpayment is \$50.00 or less. You must make arrangements with your school or the Department of Education to return the unearned grant funds.

Please note that the requirements for Title IV program funds when you withdraw are separate from Mech-Tech's refund policy, therefore you may still owe funds to Mech-Tech covering unpaid institutional charges. Mech-Tech may also charge you for any Title IV program funds that they were required to be returned. Mech-Tech's withdrawal and refund policy is explained in the Student Consumer Information catalog or discussed with a Financial Aid Counselor.

If you have further questions about Title IV program funds, you can call the Financial Aid Officers at the Caguas Main Campus who can be reached at (787) 744-1060 and (787) 743-0484. At the Mayagüez Branch, they can be reached at (787) 834-5225. At the Bayamón Branch, (787) 995-2410 or (787) 995-2405. At the Vega Baja Branch, (787) 807-0711 or (787) 807-0575, Pone Branch, (787) 709-4442, and the Orlando, Florida Campus, 1-407-888-1111.

The institution's Cancellation and Refund Policy for its Orlando, Florida branch campus is based on Florida's Fair Consumer Practices (Rule 6E-1.0032) and the requirements of ACCET:

- 1. <u>Rejection of an Applicant:</u> When the Institution rejects a student before starting classes, or if a prospective international student has his/her visa application rejected, all monies paid will be fully refunded to the applicant.
- 2. <u>Program Cancellation</u>: If the Institution cancels the program of study before starting classes, all monies paid by the student will be fully refunded.
- 3. <u>Cancellation Prior to the Start of Class or No Show</u>: If the student decides to cancel his/her admission before the first day or three working days after start date of classes all monies

paid will be fully refunded including the \$40.00 admission fee. If a student never attends class (no-show), all monies paid will be fully refunded, except the \$40.00 admission fee.

- 4. All students must settle their account balance before starting the next enrollment period.
- 5. If for any reason the institution cases operations, the money that the student has paid in excess will be refunded prorated except for the admission fee.
- 6. If a student requests and/or processes a withdrawal or is administratively withdrawn (terminated), he/she will be responsible for the balance reflected after the withdrawal calculation. The student will be notified of this balance no later than fifteen (15) days from the date in which the withdrawal is processed which will be prorated and will include a withdrawal fee of \$100.00.

#### POLICY FOR UNEARNED TUITITON DUE TO WITHDRAWAL OR TERMINATION

The institution will combine Florida State's Rule 6E-1.0032 and ACCET's Refund Policy to determine the amount of unearned tuition due to withdrawal:

- ✓ Students are financially obligated and responsible based on the enrollment period. For this purpose, the period of financial obligation is each enrollment term (quarter).
- ✓ During the first (1<sup>st</sup>) week of class, students have a drop/add period. If the student withdraws before the end of the first week, during the drop/add period, the student will be refunded all tuition and fees, except the \$40.00 admission fee.
- ✓ After the first week and through fifty percent (50%) of the period of obligation (the term), the tuition charges will not exceed a pro-rata of the tuition portion for the periods completed, plus a withdrawal fee of \$100.00 (see example).
- ✓ After fifty percent (50%) of the period of financial obligation is completed by the student, the institution may retain the full tuition for that period.

#### Refund Policy for Withdrawals and Terminations:

- a. For enrolled students that withdraw or are terminated after the first week of class, the scheduled credits will be calculated until the Last Day of Attendance (LDA) and this will be the total tuition for the period; plus a charge of an administrative fee of \$100.00.
- b. If during the late enrollment process, the student is a "no show" in one of his/her classes, even though he/she attended other classes, the Registrar's Office will begin a partial cancellation process of the enrollment, and the Finance Office will then proceed to make the corresponding adjustment in the total enrollment cost for that term. All charges and grant payments will be adjusted according to the student's final academic load for the term.

All refunds due to the student will be paid as follows:

student's address in record.

If the credit balance is originated from Title IV funds (Pell Grant, FSEOG), a check will
be issued under the student's name within 14 calendar days from the date of determination.
If the credit balance is from other aids, other sources, or from cash payments, a check will
be issued to the corresponding agency or the student's name in 30 business days from the
date of determination.
The student will have 30 additional business days to claim the check in the Collections
Office (Finance Office). If the student does not claim the check, it will be mailed to the

#### Calculation formula example for Mech-Tech Institute in Orlando, FL:

Tuition for the Period [scheduled credits until LDA] = \$4,200.00 Number of Weeks Student Attended =41.7%Number of Weeks Financially Obligated 12 = Pro rata Portion Completed 47.7% =41.7% of \$4,200.00 \$1,751.40 Unearned Tuition due to Withdrawal \$2,448.60 Owed to the Institution including Administrative Fee= \$1.851.40

For Florida students, all refunds will be made within 30 days from the date of determination.

#### RETURN OF TITLE IV FUNDS POLICY

All Institutions participating in Title IV program assistance are required to determine the earned and unearned portions of Title IV aid as of the date the student ceased attendance based on the amount of time the student spent in attendance.

The law specifies how Mech Tech College (Mech-Tech) must determine the amount of Title IV program assistance that you earn if you withdraw from school. For your information, the Title IV programs that are covered by this law are: Federal Pell Grants, TEACH Grants, Stafford Loans (Subsidized and Unsubsidized), PLUS Loans, Federal Supplemental Educational Opportunity Grants (FSEOGs), and Federal Perkins Loans.

The federal policy for "Return of Title IV" require that if a recipient of Title IV financial assistance withdraws from school during a payment period or period of enrollment in which the recipient began attendance, the school must calculate the amount of Title IV assistance the student did not earn and those funds must be returned. Mech-Tech can define this for you and fully explain which one will be applied because the amount of Title IV assistance that you have earned up to that point is determined by a specific formula.

The amount of Title IV assistance that you have earned is determined on a pro rata basis. For example, if you completed 30% of your payment period or period of enrollment, you earn 30% of the assistance you were originally scheduled to receive. Once you have completed more than 60% of the payment period or period of enrollment, you earn all the assistance that you were scheduled to receive for that period.

Below is an example of the ratio used to calculate earned Title IV program assistance:

Number of calendar days completed from start date of the payment period/period of enrollment to the last date of attendance		
	= (Title IV Funds Earned)	
Number of calendar days in payment period/period of enrollment		

If you did not receive all of the funds that you earned, you may be due a Post-withdrawal disbursement. If

your Post-withdrawal disbursement includes loan funds, your school must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Mech-Tech may automatically use all or a portion of your Post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with Mech-Tech). Mech-Tech needs your permission to use the Post-withdrawal grant disbursement for all other school charges. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow Mech-Tech to keep the funds to reduce your debt at the school.

There are some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any Direct Loan funds that you would have received had you remained enrolled past the 30th day.

If you receive (or your school or parent receive on your behalf) excess Title IV program funds that must be returned, your school must return a portion of the excess equal to the lesser of:

- 1. your institutional charges multiplied by the unearned percentage of your funds, or
- 2. the entire amount of excess funds.

The school must return this amount even if it didn't keep this amount of your Title IV program funds. The return of Title IV funds to the US ED is done within 45 days from the date in which the withdrawal is determined.

If your school is not required to return all of the excess funds, you must return the remaining amount.

Any loan funds that you must return, you (or your parent for a PLUS Loan) repay in accordance with the terms of the promissory note, therefore you will make scheduled payments to the holder of the loan over a period of time.

Unearned grant funds, in any amount, that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You do not have to repay a grant overpayment if the original amount of the overpayment is \$50.00 or less. You must make arrangements with your school or the Department of Education to return the unearned grant funds.

Please note that the requirements for Title IV program funds when you withdraw are separate from Mech-Tech's refund policy, therefore you may still owe funds to Mech-Tech covering unpaid institutional charges. Mech-Tech may also charge you for any Title IV program funds that they were required to be returned. Mech-Tech's withdrawal and refund policy is explained in the Student Consumer Information catalog or discussed with a Financial Aid Counselor.

If you have further questions about Title IV program funds, you can call the Financial Aid Officer at the Orlando, Florida branch campus, Mrs. Jessica López at 407-888-1111.

#### **5.4.4** Debts Pending Payment

Each student will be issued a receipt for each payment transaction he/she makes. The Institution will regularly send collection letters to students who owe money for services received; when the normal procedures do not bring results, the accounts will be referred to a collections agency.

#### 5.4.5 Payment Plan

The total cost of studies and fees are to be paid in their entirety during enrollment and before the first day of classes. Students, who are unable to meet this requirement, can participate in the Institution's deferred payment plan. This is designed for students who can only make payment by means of this plan and for those who are awaiting an answer and receipt of aid packages provided by federal, state or local agencies. These students will not be officially enrolled until they have signed the Payment Plan together with the Study Contract. It is each student's responsibility to stay up-to-date with his/her monthly payment plan.

#### 5.5 STUDENT COUNSELING SERVICES

The Student's Counseling Office provides services only in its Puerto Rico branch campuses. It offers professional help regarding student problems and needs in terms of their academic and personal phase. It offers guidance in the areas of values, attitudes, interests, study habits, and personal and family problems. In addition, it offers guidance on how to obtain a high-school diploma.

#### 5.5.1 Campus Life

The Institution offers the ideal environment for students who wish to forge their careers. The spacious classrooms and laboratories allow you to develop to the utmost as a technician in the program you choose. Due to our excellent relationship with private enterprises, we are pioneers in the high technology that the job market needs. With greater knowledge comes a better chance for you to join the employment market.

#### 5.5.2 Drug Counseling Program

This program is only offered in the Puerto Rico branch campuses. The Institution maintains an ongoing counseling program to fight off drug abuse. The Counseling Office works together with the Administration for Mental Health and Drug Addiction (ASSMCA) and its prevention programs by offering workshops on drug use and abuse. This Institution operates under the concept of a "Drug-Free Institution".

## 5.6 CAREER SERVICES OFFICE (PLACEMENT)

The Career Services Office coordinates practice centers with various government entities, industry and commerce where students can do their practice as required in their study program. It offers guidance to graduation candidates regarding job opportunities and interview techniques. Services offered to graduates include: referral for possible jobs and follow-up regarding their performance at work places. At MTI, the Career Services and job placement assistance is offered in Spanish and English. Completing a program in a language other than English, may reduce employability where English is required.

The office provides students orientation on how to obtain their license to work in their professions, if applicable. The Institution does not guarantee employment to students, prospective students or graduates, but it has always maintained a job placement average of 70% or more.

#### 5.7 USE OF THE TOOL ROOM

The Tool Room is destined to offer loans of the tools and equipment necessary for the use of students and instructors so that they can perform their laboratories. Instructors are required to request this service in writing, and the request will be made with five (5) days of anticipation and the request must be in accordance to the course being given. The equipment and/or tools requested must be handed back to the Tool Room on the same day that the service was provided. In case that these are damaged and/or lost, the instructor must be responsible for paying the equivalent price in the market or will have to substitute the equipment and/or tool for one of the same or better quality.

Students are required to provide the identification card (ID) provided by the Institution when requesting this service. The ID will be returned when the student returns the tools and/or equipment lent. New students, who do not have their ID, can show their class schedule at least during the first two (2) weeks of class.

#### 6.0 PROGRAMS OF STUDY

The Institution recommends that you follow the curricular sequence that is presented in each program's curricular system. It is required to follow the pre-requisites in the order established.

#### 6.1 COURSE CODING SYSTEM

The coding system used by the Institution for its courses is composed of numbers and letters. The code has undergone several changes, resulting from the need for new programs and revised curricula. A 7-digit code, which identifies the program, or areas to which the course belongs identifies each course. The codes are identified as follows:

✓ The letters identify the classes, the numbers identify the term the class falls in, and the last letter identifies whether it is a day or night class.

### **✓** Technical Programs:

- T = Technical Course
- C = Complementary Courses
- A = General Education Courses
- Four letters = Identify the Course
- # = Which term the class is in
- D = Day
- E = Evening

#### **✓** Associate Degree Programs:

- G = Associate Degree
- T = Technical Courses

- C = Complementary Courses
- A = General Education Courses
- Four letters = Identify the Course
- # = Which term the class is in
- D = Day
- E = Evening

#### 6.2 DESCRIPTION OF ASSOCIATE DEGREE PROGRAMS

The Associate Degree programs are offered only in the Puerto Rico branch campuses of Caguas and Vega Baja. The academic programs leading to an Associate Degree are offered 51-using the credit hour as a basis. The total of credits in each of the programs is 90 credits, of which 30 pertain to general education courses, 42 to the major, 12 related courses and 6 for practice in the Industry.

### **6.2.1** Each program contains the following components:

- a. **General Education Component** This component contributes to the student's intellectual and humanistic development. It offers balance in the curriculum and includes subjects such as natural sciences, humanities and social and administrative sciences. In addition, communication skills and a sense of personal and social responsibility are addressed.
- Student's Major Component This component includes the courses that technically
  enable the student to effectively practice the profession for which the program is
  designed.
- c. **Related Course Component** This component of courses reinforces the courses in the student's specialty and expands the scope of the student's technical skills. In addition, these courses supplement the knowledge necessary to effectively become a part of the professional and/or entrepreneurial practice.

#### INSTITUTIONALLY ACCREDITED PROGRAMS OF STUDY: 6.3

Programs	CREDITS	CLOCK HOURS	LENGTH MONTHS
Associate Degree in Technology in Electrical Engineering	90	1,800	24
Associate Degree in Technology in Mechanical Engineering	90	1,800	24
Associate Degree in Automotive Mechanics Technology	90	1,800	24
Associate Degree in Industrial Electromechanical Technology	90	1,800	24
Associate Degree in Biomedical Equipment Repair	90	1,800	24
Advanced Automotive Technology	60	1,200	15
Diesel Technology and Advanced Systems	60	1,200	15
Technology in Advanced Automatic Transmissions	48	520	12
Automotive Mechanics	36	720	9
Technology in Industrial Electricity with PLC and Renewable Energy	60	1,200	15
Technology in Refrigeration & Air Conditioning	60	1,200	15
Technology in Industrial Welding	60	1,200	15
Technology in Marine Mechanics with Electronic Systems	60	1,200	15
Technology in Collision and Auto Body Repair	60	1,200	15
Motorcycle Maintenance and Repair	48	960	12
Technology in Racing Mechanics	48	960	12
Audiovisual Technology and Security Systems	36	720	9
Associate Degree in Dental Assisting with Expanded Functions	84	1,680	21

# Programs of study for Mech-Tech Institute of Orlando, Florida: \*These are offered in English language or bilingual program (Spanish/English)

Programs	CREDITS	CLOCK HOURS	LENGTH MONTHS
Automotive Mechanics	48	960	12
Technology in Racing Mechanics	48	960	12
Technology in Industrial Welding	48	960	12
Technology in Diesel Mechanics	48	960	12



# PROGRAMS OF STUDY DEGREE LEVEL

# **CAGUAS AND VEGA BAJA BRANCHES**

(Available only at these two sites)

# ASSOCIATE DEGREE IN TECHNOLOGY IN ELECTRICAL ENGINEERING 90 CREDITS (24 months)

This program is designed to offer the student the theoretical and practical knowledge required by the modern electricity industry to successfully perform in a changing environment. The program also provides an integrated technical and human formation with emphasis in the development of business skills and leadership.

The program promotes skills development for decision-making and to anticipate and attend typical situations in the working occupational environment. The student will master techniques to make electrical installations taking into consideration the occupational safety rules, codes, laws, regulations, and specifications of Puerto Rico. The graduate will be capable of doing electrical jobs in residences and buildings by fixing electrical engines, installing power plants, and designing and installing electrical equipment in industries. The graduate will be prepared to take the exam offered by the Examining Board of Expert Electricians of Puerto Rico.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the test.

The only review that is offered before completing the program of study is the Electrician Helper's, because the Helper's Examination can be taken before completing it.

This program also prepares students to work in positions, such as: Electrician, Electrician Assistant, Electrical Installer, Designer of Electrical Equipment, Maintenance of Electrical Motors, Welder, Instrumentalist, Programmer (PLC), Illumination Technician, Transformers Technician.

Licensing requirements: During or at the end of the program of study, students or graduates can take the Electrician Helper Examining Board's test. After one year of working in the profession, the Government of Puerto Rico requires that they take the Board Exam for Electricity Expert.

#### First Quarter.

<b>Code-Title</b>	Course	Credits
AGEBI1D	Basic Spanish I – No. 101	3
AGMAG1D	General Mathematics	3
CGSEI1D	Industrial Safety	3
TGFEER1D	Fundamentals of Electricity with Renewable Energy and Laboratory	3
		12 credits

#### **Second Quarter**

Code-Title	Course	Credits
AGEBII2D	Basic Spanish II – No. 102	3
AGMAT2D	Technical Mathematics	3
CGCOM2D	Introduction to Computers	3
TGIEL2D	Residential Electrical Installations and Laboratory	3
		12 credits

**Third Quarter** 

Code-Title	Course	Credits
AGIBI3D	Basic English I – No. 101	3
AGFIT3D	Technical Physics	3
TGDIT3D	Technical Drawings	3
TGSIL3D	Illumination Systems and Laboratory	3
		12 credits

**Fourth Quarter** 

Code-Title	Course	Credits
AGIBII4D	Basic English II – No. 102	3
TGFEL4D	Electronics Fundamentals and Laboratory	3
TGMML4D	Maintenance of Electrical Motors and Laboratory	3
TGCEL4D	Circuits and Electrical Controls and Laboratory	3
		12 credits

Fifth Quarter

Code-Title	Course	Credits
TGPLC5D	Principles of Combational Logic and Laboratory	3
TGRCE5D	National Electrical Code and Regulations	3
AGCHU5D	Human Conduct and Interpersonal Relations	3
TGIPL5D	Installation of Electrical Panels, Branch Circuits, Transfer Switches, and Laboratory	3
		12 credits

Sixth Quarter

Code-Title	Course	Credits
TGLPE6D	Reading of Schematic Drawings	3
TGINS6D	Instrumentation	3
TGLDL6D	Distribution Lines, Transformers, and Laboratory	3
AGHDI6D	Humanities I – No. 101	3
		12 credits

**Seventh Quarter** 

Code-Title	Course	Credits
TGCLP7D	Programmable Logic Controllers (PLC)	3
CGSOB7D	Basic Welding and Laboratory	3
CGAGN7D	Business Ethics and Administration	3
AGHUII7D	Humanities II – No. 102	3
		12 credits

#### **OUTPUT ASSESSMENT**

#### **Eight Quarter**

Code-Title	Course	Credits
TPRIN8D	Practice in the industry	6
		6 credits

#### **Program Distribution in Hours-Credits**

Area	Hours	Credits
General Education	600	30
Major	900	42
Related Courses	240	12
Field Practice (Laboratory)	120	6
	1,800	90 credits

<sup>\*</sup>Program length – 24 months.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the study program.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided re-teaching in the areas of deficiency presented in the exam.

# ASSOCIATE DEGREE IN TECHNOLOGY IN MECHANICAL ENGINEERING 90 CREDITS (24 months)

This program is designed to provide students with theoretical knowledge and technical skills required in the tool and die making industry as well as the complementary practical training. The program also provides an integrated technical and human formation with emphasis in the development of business skills and leadership.

The courses apply mathematical concepts in order to design, produce, offer maintenance operations, and solve problems related to products and procedures. The courses teach the operation and use of specialized equipment such as lathes, mills, grinders, hydraulic hacksaws, computerized equipment, and precise measuring instruments; among others, to repair, construct or reconstruct forms and dies.

The program is designed to develop in students the skills required to analyze specifications, inspect and approve finished products, and the application and construction of designs. The graduate will be able to perform as a Tool and Die Maker and occupy supervising and administrative positions in the industry.

This program also prepares students to work in positions, such as: Tool and Die Maker, General Mechanics, Welder, CNC Programmer, Workshop Supervisor, Parts Department Employee, Machinist, Draftsman.

#### **First Quarter**

Code-Title	Course	Credits
AGCHU1D	Interpersonal Relations	3
AGSCMI1D	Systems and Concepts for Shop Measurements I	3
TGDIT1D	Technical Drawing	3
TGITIM	Introduction to Technology in Mechanical Engineering	3
		12 credits

#### **Second Quarter**

Code-Title	Course	Credits
AGEBII2D	Basic Spanish II	3
AGSCMII2D	Systems and Concepts for Shop Measurements II	3
TGPMP2D	Metals and Plastics	3
CGCOM2D	Computer Principles	3
		12 credits

#### **Third Quarter**

Code-Title	Course	Credits
AGIBI3D	Basic English I	3
TGCAD3D	CAD - SolidWorks®	3
TGBAL3D	Bench and Laboratory	3
AGFIT3D	Technical Physics	3
		12 credits

**Fourth Quarter** 

Code-Title	Course	Credits
AGIBII4D	Basic English II	3
CGRIT4D	Writing of Technical Reports	3
TGTOML4D	Methal Lathe and Laboratory	4
CGSEGI4D	Industrial Safety	2
		12 credits

Fifth Quarter

Code-Title	Course	Credits
AGEBII5D	Basic Spanish II	3
TGMEC5D	Common Market (Currency Exchange)	2
TGFRE5D	Milling and Laboratory	4
TGFUE5D	Fundamentals of Electricity	3
		12 credits

**Sixth Quarter** 

Code-Title	Course	Credits
TGFEL6D	Fundamentals of Electronics	3
TGFRAV6D	Advanced Fabrication Techniques	3
TGDTR6D	Dies Design and Construction and Laboratory	6
		12 credits

**Seventh Quarter** 

Code-Title	Course	Credits
CGAGN7D	Business Ethics and Administration	3
TGSCL7D	CNC and Laboratory	3
TGHNE7D	Hydraulics and Pneumatics	3
CGSOB7D	Welding and Laboratory	3
		12 credits

#### **OUTPUT ASSESSMENT**

**Eight Quarter** 

Code-Title	Course	Credits
TPRIN8D	Practice in the industry	6
		6 credits

#### **Program Distribution in Hours-Credits**

Area	Hours	Credits
General Education	480	24
Major	880	44
Related Courses	320	16
Field Practice (Laboratory)	120	6
	1,800	90 credits

<sup>\*</sup>Program length – 24 months.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the study program.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided re-teaching in the areas of deficiency presented in the exam.

# ASSOCIATE DEGREE IN AUTOMOTIVE MECHANICS TECHNOLOGY 90 CREDITS (24 months)

This program is designed to offer the student the theoretical and practical knowledge required in the automotive industry to be able to successfully perform and comply with modern workshops demands. The program provides an integrated technical and human academic formation with emphasis in the development of business skills and leadership.

The program promotes the development of skills for decision-making and to anticipate and attend typical situations in the working occupational environment. The student will master technical concepts and skills for repairing and maintaining automobiles, tools usage and special technology in the automobile mechanics profession. The graduate will have complete domain in the use of sophisticated instruments to accurately diagnose faults in any types of computerized fuel injection systems. The graduate will be prepared to take the Automotive Technician exam offered by the State Examining Board of Puerto Rico.

Elements of self-employment are incorporated to stimulate the establishment of workshops offering automotive maintenance and repair services.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

This program also prepares students to work in positions, such as: Automotive Technician, Automobile Air Conditioning Mechanic, make diagnosis, Welder, Motors Repairer, Transmissions Mechanics, Parts Department employee, Workshop Supervisor, Service Supervisor, own business.

Licensing requirements: The Puerto Rico Automotive Technicians and Automotive Mechanics Examining Board requires graduates from this program to take the Examining Board for Automotive Technician or Automotive Mechanic.

#### **First Quarter**

Code-Title	Course	Credits
AGEBI1D	Basic Spanish I – No. 101	3
AGMAG1D	General Mathematics	3
CGSEI1D	Industrial Safety	3
TGPMA1D	Principles of Automotive Mechanics	3
		12 credits

#### **Second Quarter**

Code-Title	Course	Credits
AGEBII2D	Basic Spanish II – No. 102	3
AGMAT2D	Technical Mathematics	3
TGMCL2D	Internal Combustion Engine and Laboratory	6
		12 credits

**Third Quarter** 

Code-Title	Course	Credits
AGIBNI3D	Basic English I – No. 101	3
AGFIT3D	Technical Physics	3
TGSIL3D	Fuel Injection System and Laboratory	3
CGCOM3D	Introduction to Computers	3
		12 credits

**Fourth Quarter** 

Code-Title	Course	Credits
AGIBII4D	Basic English II – No. 102	3
	Electrical and Electronic System of the Automobile	
TGSEL4D	and Laboratory	3
TGSIL4D	Electronic Injection System and Laboratory	3
		12 credits

Fifth Quarter

Code-Title	Course	Credits
	Air Conditioning System of the Automobile and	
TGSAC5D	Laboratory	3
	Direction, Suspension, Brakes System and	
TGSDL5D	Laboratory	3
AGCHU5D	Human Conduct and Interpersonal Relations	3
TGIHI5D	Hydraulic Impulse	3
		12 credits

**Sixth Quarter** 

Code-Title	Course	Credits
	Power Transmission System and Differentials and	
TGTFL6D	Laboratory	3
CGSOB6D	Basic Welding and Laboratory	3
TGFMD6D	Principles and Function of Diesel Engines	3
AGHUI6D	Humanities I – No. 101	3
		12 credits

**Seventh Quarter** 

Code-Title	Course	Credits
TGPAT7D	Advanced Practice in Automotive Technology	3
CGAGN7D	Business Ethics and Administration	3
AGHUII7D	Humanities II – No. 102	3
		12 credits

#### **OUTPUT ASSESSMENT**

#### **Eight Quarter**

Code-Title	Course	Credits
TPRIN8D	Practice in the industry	6
		6 credits

#### **Program Distribution in Hours-Credits**

Area	Hours	Credits
General Education	600	30
Major	900	42
Related Courses	240	12
Field Practice (Laboratory)	120	6
	1,800	90 credits

<sup>\*</sup>Program length – 24 months.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the study program.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided re-teaching in the areas of deficiency presented in the exam.

# ASSOCIATE DEGREE IN BIOMEDICAL EQUIPMENT REPAIR 90 CREDITS (24 months)

This program has been designed to offer the student theoretical and practical knowledge required by the industry of health services and maintenance. The student will develop with success and will comply with current policies of diagnosis centers, healthcare facilities and modern hospitals. The program promotes an academic, technical and human formation with emphasis in the development of management and leadership skills.

The program promotes the development of skills for decision-making, to anticipate and attend on-the-job scenarios. The student will have domain of technical knowledge and necessary repair and maintenance skills of biomedical equipment, the use of tools, instruments and special technology in the profession of repairing and providing maintenance of specialized equipment. The student will have domain of sophisticated precision instruments to diagnose failures in computerized calibration equipment used in biomedical equipment and in all healthcare facilities.

Once this program has been completed, the student will be capable of diagnosing failures in medical equipment and will develop repair, calibration and measuring skills of precision biomedical instruments.

This program also prepares students to work in positions, such as: Biomedical Equipment Repair Technician, Diagnosis of specialized equipment, Preventive Maintenance of machinery and equipment, Instrumentation Technician.

Some employers may establish Immunization requirements, such as: Hepatitis B, Flu Shot, Chicken Pox, and Anti-Doping test

#### **First Ouarter**

Code-Title	Course	Credits
AGEBI1D	Basic Spanish I – No. 101	3
AGMAG1D	General Mathematics	3
TGFUE1D	Fundamentals of Electricity	3
TGTBIOT1D	Introduction to Biomedical Technology and Medical Terminology	3
		12

#### **Second Quarter**

Code-Title	Course	Credits
AGEBII2D	Basic Spanish II – No. 102	3
AGMAT2D	Technical Mathematics	3
CGCOM2D	Introduction to Computers	3
AGFIT2D	Technical Physics	3
		12

#### **Third Quarter**

Code-Title	Course	Credits
AGIBI3D	Basic English I – No. 101	3
TGFDE3D	Fundamentals Electronics and Laboratory	3
TGDIT3D	Technical Drawings	3
TGFISIO3D	Applied Physiology for Biomedical Repair Technicians	3
		12

# **Fourth Quarter**

Code-Title	Course	Credits
AGIBII4D	Basic English II – No. 102	3
TGCLDI4D	Digital Logic Circuits and Laboratory	3
TGEABIL4D	Advanced Biomedical Electronics and Laboratory	6
		12

# Fifth Quarter

Code-Title	Course	Credits
TGLIPL5D	Reading and Interpretation of Schematic Drawings	3
TGIMEBI5D	Instrumentation and Biomedical Measurements I	3
AGCHU5D	Human Conduct and Interpersonal Relations	3
TGCLSEC5D	Sequential Logic Circuits and Laboratory	3
		12

#### Sixth Quarter

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Code-Title	Course	Credits
TGIMEBI26D	Instrumentation and Biomedical Measurements II	3
TGQIN6D	Industrial Chemistry for Health Sciences: Hygiene and Safety	3
	Biomedical Engineering Techniques	3
TGTING6D	(Computers in Biomedical Equipment)	
AGHUI6D	Humanities I – No. 101	3
		12

#### **Seventh Quarter**

Code-Title	Course	Credits
TGROBO7D	Robotics and Laboratory	2
TGCLP7D	Programmable Logic Controllers (PLC)	4
TGARIML7D	Application and Repair of Medical Instruments and Laboratory	3
	(Troubleshooting)	
TGSEMBI7D	Seminar in Biomedical Applications	3
		12

# **OUTPUT ASSESSMENT**

# **Eight Quarter**

Code-Title	Course	Credits
TPRIN8D	Clinical Practice (Rotations)	6

#### **Program Distribution in Hours-Credits**

Area	Hours	Credits
General Education	600	30
Major	900	36
Related Courses	240	18
Field Practice (Laboratory)	120	6
	1,800	90 credits

<sup>\*</sup>Program length – 24 months.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the study program.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided re-teaching in the areas of deficiency presented in the exam.

In the Associate Degree for Biomedical Equipment Repair Program, the Clinical Phase (Practice) is currently available during the daytime only. There are no evening practice centers available in Puerto Rico for this profession. The student must make proper arrangements to complete their practice during the day in the last term of studies.

#### ASSOCIATE DEGREE IN INDUSTRIAL ELECTROMECHANICAL TECHNOLOGY 90 CREDITS (24 months)

This program has been designed to offer the student the theoretical and practical knowledge required by the electronics and modern mechanics industry so that he/she can develop with success and comply with the modern industry requirements. The program provides an academic, technical and human integral formation with emphasis in the development of management and leadership skills.

The program promotes skills development for decision making and to anticipate personal situations in the labor and occupational market. The student will have domain of technical knowledge and skills required in the repair and maintenance of equipment, in the use of tools, instruments and special technology in the profession of equipment and machinery maintenance and repair. The student will have domain of sophisticated precision equipment to diagnose failures in the computerized function of technological equipment in all types of industry.

The objective of the Associate Degree in Industrial Electromechanical Technology is the formation of highly capable professionals in the selection, installation, operation and maintenance of equipment and electrical and mechanical installations that are used in any industry, either manufacturing, assembly or service.

This program also prepares students to work in positions, such as: Industrial Mechanic, General Mechanic, Electrician Assistant, Preventive Maintenance of Machinery and Motors, Electrical Panels Installer, Instrumentation, Welder, Diagnosis of Air Systems, Programmer (PLC).

#### **First Quarter**

Code-Title	Course	Credits
AGEBI1D	Basic Spanish I – No. 101	3
AGMAG1D	General Mathematics	3
CGSEI1D	Industrial Safety	3
TGIEIN1D	Introduction to Industrial Electromechanics	3
	•	12

#### **Second Ouarter**

Code-Title	Course	Credits
AGFIT2D	Technical Physics	3
AGMAT2D	Technical Mathematics	3
CGCOM2D	Introduction to Computers	3
AGEBII2D	Basic Spanish II – No. 102	3
		12

#### **Third Quarter**

Code-Title	Course	Credits
AGIBI3D	Basic English I – No. 101	3
TGFEER3D	Fundamentals of Electricity with Renewable Energy and Laboratory	3
TGDIT3D	Technical Drawings	3
TGMEGEN3D	General Mechanics (Machinery and Tools)	3
		12

# **Fourth Quarter**

Code-Title	Course	Credits
AGIBII4D	Basic English II – No. 102	3
TGFEL4D	Fundamentals of Electronics and Laboratory	3
TGMML4D	Maintenance of Electrical Motors and Laboratory	3
TGCEL4D	Circuits and Electrical Controls and Laboratory	3
		12

# Fifth Quarter

Code-Title	Course	Credits
TGPLC5D	Principles of Combinational Logic and Laboratory	3
TGHNE5D	Hydraulics, Pneumatics and Laboratory	3
AGCHU5D	Human Conduct and Interpersonal Relations	3
	Installation of Electrical Panels, Branch Circuits, Transfer Switches and	
TGIPL5D	Laboratory	3
		12

# Sixth Quarter

Code-Title	Course	Credits
TGLPE6D	Reading of Schematic Drawings	3
TGINS6D	Instrumentation	3
TGRACL6D	Refrigeration and Air Conditioning System and Laboratory	3
AGHUI6D	Humanities I – No. 101	3
		12

# **Seventh Quarter**

Code-Title	Course	Credits
TGCLP7D	Programmable Logic Controllers (PLC)	3
CGSOB7D	Welding, Metallurgy and Laboratory	3
TGIROB7D	Robotics and Laboratory	3
AGHUII7D	Humanities II – No. 102	3
		12

#### **OUTPUT ASSESSMENT**

# **Eight Quarter**

Code-Title	Course	Credits
TPRIN8D	Practice in the Industry	6
		6

#### **Program Distribution in Hours-Credits**

Area	Hours	Credits
General Education	600	30
Major	900	42
Related Courses	240	12
Field Practice (Laboratory)	120	6
	1,800	90 credits

<sup>\*</sup>Program length – 24 months.

#### **Output Assessment:**

The Output Assessment is a valuation exam that will be taken by the students before entering their practice phase. This exam serves as a measuring tool for placing students in their practice phase and also as a guide for the institution to further evaluate the study program.

The student must pass the test with a grade of 70% or higher. If the student fails the exam, he/she will have as many opportunities as he/she requires of repeating it. The student will be provided re-teaching in the areas of deficiency presented in the exam.

# ASSOCIATE DEGREE IN DENTAL ASSISTING WITH EXPANDED FUNCTIONS 84 credits (1,680 hours)

This curriculum has been designed to provide knowledge in dental anatomy and pathology, dental materials and instruments and dental office procedures by providing students with the necessary skills to assist dentists in caring and treatment of patients.

The program provides advanced training which allows the graduate a "four hands" practice supervised by a dentist. Graduates of this program will quality to work as Expanded Functions Assistant and as Regular Assistants.

Even though Expanded Functions does not require an examining board, graduates are required to take a test to acquire a license as previously described in the Dental Assistant program.

During the Board Review Seminar (DAASO 514) course in the seventh term, a review for the Dental Assisting Board Exam is offered.

This program also prepares students to work in positions, such as: Expanded Functions Assistant and Regular Assistants.

Licensing requirements: The Puerto Rico Examining Board for Dental Assistant, requires graduates from this program to take the Board Exam.

Immunization requirements for employment may include: Hepatitis B (three doses)

Additional requirements for employment may include: Photo ID, Background Check, Health Certificate, CPR Training (up-to-date)

#### **First Term**

Code-Title	Course	Credits
PSYO 100	Skills Development	3
BIOO 111	Basic Biology	3
SPAO 111	Basic Spanish	3
DAASO 103	Dental Anatomy	3
		12

#### **Second Term**

Code-Title	Course	Credits
DAASLO 101	Dental Materials	4
DAASO 102	Human Anatomy and Physiology	2
DAASLO 106	Clinical Sciences and Dental Instruments I	6
		12

#### **Third Term**

Code-Title	Course	Credits
DAASLO 104	Dental Radiology Laboratory I	4
DAASO 100	Infection Control Principles	2
DAASLO 206	Clinical Sciences and Dental Instruments II	4
DAASO 208	Oral Histology and Embryology	2
		12

#### **Fourth Term**

Code-Title	Course	Credits
ENGO 111	Basic English (Grammar I)	3
DAASLO 201	Dental Office Procedures and Billing	4
DAASO 214	Dental Radiology Laboratory II	2
DAASLO 300	Preventive Dentistry	3
		12

#### Fifth Term

Code-Title	Course	Credits
ENGO 112	Basic English (Grammar II)	3
DAASO 107	Odontology and its Drugs	3
DAASO 202	Microbiology and Pathology of the Oral Cavity	3
MATO 100	General Mathematics I	3
		12

#### **Sixth Term**

Code-Title	Course	Credits
ENGO 113	Conversational English	3
DAASLT 403	Morphology and Oral Anatomy Concepts / Restorative Procedure Laboratory	3
DAAST 415	External Clinic Practice	6
		12

#### **Seventh Term**

Code-Title	Course	Credits
DAAST 515	External Practice for Dental Assistant with Expanded Functions	7
DAASO 514	Board Review Seminar	2
PSYO 302	Human Relations	3
		12

#### PROGRAM SUMMARY

General Education Courses 24 credits
Concentration Courses 60 credits
Total Credits 84 credits

Program length 21 months

Total hours 1,680



# TECHNICAL PROGRAMS OF STUDY APPLICABLE TO MAIN CAMPUS AND BRANCH CAMPUSES IN PUERTO RICO

# ADVANCED AUTOMOTIVE TECHNOLOGY (1,200 CLOCK HOURS / 60 CREDIT HOURS) (15 months)

#### **Program Description:**

This program has been designed to develop in the student the technical knowledge and necessary skills to repair and provide maintenance to all types of automobiles. Hydraulic lifters are used to examine the front-end of the vehicle, brakes systems and power transmissions. Special tools are also used to diagnose computerized systems, brakes and other components.

In this program the following areas are studied: lubrication and cooling systems, air conditioning systems, internal combustion engine, alignment, electrical system, safety systems including airbags, ABS systems, satellite navigational system and the latest technologies available from different manufacturers and Mech-Tech's training centers (Chrysler, Nissan/Kia, Pep Boys).

This program also prepares students to work in positions, such as: Automotive Technician, Automotive Mechanic, Parts Department Employee, Motorcycles Mechanic, Welder, Racing Team Technician, Service Advisor, Transmissions Technician, Electromechanical Technician, Alignment Technician, own business.

#### Program Objective:

The Advanced Automotive Technology Program has been designed to offer the student a complete training of advanced techniques in the Automotive Mechanics field. It also provides knowledge in managing diagnosis instruments of the automobile, engine repair, electrical system of the automobile, transmissions, alignment, air conditioning system and brakes system. The student will also learn the safety rules and first aid procedures required for this trade.

Upon completion of the Advanced Automotive Technology Program, the student will be prepared with the necessary knowledge and skills to take the Automotive Technician bar, obtain the corresponding license and work in this profession where his/her services are required. The student will also have the opportunity to establish his/her own business after acquiring the necessary experience.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Licensing requirements: The Puerto Rico Automotive Technicians and Automotive Mechanics Examining Board requires graduates from this program to take the Board Exam for Automotive Mechanic or Automotive Technician.

#### ADVANCED AUTOMOTIVE TECHNOLOGY

# **Program: Curricular Content**

# **General Education Courses**

Code	Courses/Classes	Credits
AINGL1D	Technical English	2
AMATE4D	Applied Mathematics	2
AREHU5D	Human Relations	$\frac{1}{5}$
		5
<b>Concentration Cou</b>	<u>rses</u>	
TELEL1D	Electricity and Electronics Fundamentals	3
TIMAU1D	Introduction to Automotive Mechanics	3
TMCIA1D	Internal Combustion Engine of the Automobile	
	and Laboratory	3
TSINY12D	Injection System of the Automobile I and Laboratory	3
TREMO2D	Engine Repair and Laboratory	3
TTDAL2D	Front-End Steering and Wheel Alignment and Laboratory	3
TSINY23D	Injection System of the Automobile II and Laboratory	3
TSEEA13D	Electrical and Electronic System of the Automobile I	
	and Laboratory	3
TFABS3D	Brakes and ABS (TCS) System of the Automobile	
	and Laboratory	3
TATEC4D	Technological Advances in Automotive Mechanics	
	(Industry – Training Centers)	3
TSACAL4D	Air Conditioning System of the Automobile and Laboratory	3
TSEEA24D	Electrical and Electronic System of the Automobile II	
	and Laboratory	4
TSTFAL5D	Power Transmission System of the Automobile	
	and Laboratory	4
TLEXO5D	Occupational Experience Laboratory	<u>6</u>
		47
Cursos Complemen		
CSEGU1D	Industrial Safety	1
CCOST5D	Costs y Estimates	1
CSOLDL2D	Welding and Laboratory	3
CICOM3D	Introduction to Computers	<u>3</u> 8
		8

# **Program Summary**

Total Credits : 60
Total Hours : 1,200
Program Length : 15 Months

# DIESEL TECHNOLOGY AND ADVANCED SYSTEMS (1,200 CLOCK HOURS / 60 CREDIT HOURS) (15 months)

#### **Program Description:**

In this program the student will learn to repair and provide maintenance to vehicles and diesel equipment by using special tools, equipment and precision instruments. Failures in diesel engines are diagnosed; they are disassembled, examined, and defective parts are replaced. Other engine systems are studied, such as: injectors systems, hydraulic systems, combustion systems, brakes systems, and power transmissions systems.

This program also prepares students to work in positions, such as: Industrial Equipment Repair Technician, Welder, Racing Team Technician, Motorcycles Mechanic, Performance Engine Tuning, Service Advisor, Parts Department Employee.

#### Program Objective:

The Diesel Technology and Advanced Systems Program has been designed to offer the student a complete training of the most advanced techniques in the Diesel Mechanics field; it also provides diagnosis and repair of diesel engines. The student will have the capability of working with injection systems, brakes systems, hydraulic system, and transmission system, and will also learn the safety rules and first aid procedures required for this trade.

Upon completion of the program, the student will be prepared to take the Diesel Mechanic bar offered by the State Examining Board and will perform satisfactorily in this trade after passing the test and acquiring the corresponding license.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Licensing requirements: The Puerto Rico Automotive Technicians and Automotive Mechanics Examining Board requires graduates from this program to take the Board Exam for Automotive Mechanic or Automotive Technician.

### DIESEL TECHNOLOGY AND ADVANCED SYSTEMS

# **Program: Curricular Content**

# **General Education Courses**

<b>Code</b>	Courses / Classes	Credits
AMATE1D	Applied Mathematics	2
AINGL5D	Technical English	2
AREHU2D	Human Relations	<u>1</u> 5
		5
<b>Concentration Cours</b>	<u>es</u>	
TIMDI1D	Introduction to Diesel Mechanics	3
TCID11D	Internal Diesel Combustion I and Laboratory	6
TCID22D	Internal Diesel Combustion II and Laboratory	5
TELDI2D	Diesel Cooling and Lubrication Systems and Laboratory	3
TSEDI3D	Diesel Electrical and Electronic Systems and Laboratory	3
TTFDI5D	Diesel Power Transmissions and Laboratory	4
TSRFD3D	Diesel Wheels and Brakes System and Laboratory	3
TSHIN4D	Diesel Hydraulic and Pneumatic Systems and Laboratory	3
TSIEDL4D	Diesel Injection System and Laboratory	6
TSACD3D	Diesel Air Conditioning System and Laboratory	3
TLEXO5D	Occupational Experience Laboratory	6
TFDEL2D	Electronics Fundamentals	_2_
		47
Complementary Cour	<u>rses</u>	
CSEGU4D	Industrial Safety	1
CCOST5D	Costs and Estimates	1
CSOLDL3D	Welding and Laboratory	3
CICOM2D	Introduction to Computers	3 <u>3</u> 8
	_	8

### **Program Summary**

Total Credit Hours : 60

Program Length : 15 Months Total Clock Hours : 1,200

# TECHNOLOGY IN ADVANCED AUTOMATIC TRANSMISSIONS (960 CLOCK HOURS / 48 CREDIT HOURS) (12 months)

#### **Program Description:**

In this program, the students learn to dismount, disassemble, repair, and make tests of manual and automatic transmissions using specialized tools required in the profession. They use lifting jacks, automobile lifters, and transmissions are dismounted and mounted from automobiles, trucks and buses. Bands, disks, seals, and valves are changed. Transmissions are installed and checked.

This program also prepares students to work in positions such as: transmissions mechanic, automotive mechanics, light mechanics, diagnosis, and parts department employee.

#### Program Objective:

At the end of this program, the graduate will be qualified to take and approve the examination for Automotive Mechanic and to satisfactorily perform as transmissions mechanic; after obtaining the corresponding license.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Optional Licensing requirements: The graduate from this program can take the Board Exam for Automotive Mechanic or Automotive Mechanic Technician.

#### TECHNOLOGY IN ADVANCED AUTOMATIC TRANSMISSIONS

# **Program: Curricular Content**

# **General Education Courses**

<u>Code</u>	<u>Courses / Classes</u>	<b>Credits</b>
AMATE2D	Applied Mathematics	2
AREHU4D	Human Relations	1
CSEGU1D	Industrial Safety	1
		4
Concentration (	<u>Courses</u>	
TIMAU1D	Introduction to Automotive Mechanics	3
TMCI11D	Internal Combustion Engine and Laboratory	4
TITAU1D	Introduction to Automatic Transmissions	4
TSEEA	Electrical and Electronic Systems of the Automobile and Laboratory	6
TCMTA2D	Mechanical Components in Automatic Transmissions	1
TSEJA3D	Automobile Fuel Injection System (European, Japanese,	
	and American Automobiles) and Laboratory	6
TTATD3D	Automatic Transmissions (Front-End Drive of European, Japanese and American Automobiles) and Laboratory	4
TDIEJ3D	Differentials and Drive Axles	2
TTATT4D	Automatic Transmissions (Rear-End Drive of European, Japanese,	6
	and American Automobiles) and Laboratory	
TSCEL4D	Electronic Controls and OBD II System	
	(II Generation Computerized Diagnosis)	5
		41
Complementary	<u>Courses</u>	
CICOM2	Introduction to the Computer	<u>3</u> 3

### **Program Summary**

Total Credit Hours : 48 Total Clock Hours : 960

Program Length : 12 Months

#### AUTOMOTIVE MECHANICS (36 CREDITS – 720 HOURS) (9 months)

#### Program Description:

This program has been designed to provide the student with the required knowledge and skill to take the Automotive Mechanics test offered by the Examining Board, obtain the corresponding license and be able to work in this profession under the supervision of an authorized Automotive Technician.

The following areas are studied: carburetion, internal combustion, electric and electronic system, front end and transmission. The program offers an academic formation and integrates intellectual, technical and human aspects and makes use of modern tools and equipment used in this profession.

This program also prepares students to work in positions such as: automotive mechanic, light mechanics, alignment, motorcycles mechanic, parts department employee.

#### **Program Objective:**

Upon completion of the Automotive Mechanics Program, the student will be prepared with the necessary skills to work as an Automotive Mechanics and will acquire the necessary knowledge to take the Automotive Mechanic Board Exam. The Automotive Mechanic will work under the supervision of acertified Automotive Technician.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Licensing requirements: The Puerto Rico Automotive Technicians and Automotive Mechanics Examining Board requires graduates from this program to take the Board Exam for Automotive Mechanic.

#### **AUTOMOTIVE MECHANICS**

# **Program: Curricular Content**

### **General Education Courses**

<u>Code</u>	Courses / Classes	Credits
AINGL3D	Technical English	2
Concentration Cour	<u>ses</u>	
TIMAU1D	Introduction to Automotive Mechanics	3
TMCII1D	Internal Combustion Engine of the Automobile and Laboratory	
TSCOAL1D	Fuel System of the Automobile and Laboratory	y 5 3 3
TREMO2D	Engine Repair	3
TSELG2D	Gas Emission and Control System of the Automobile	
	and Laboratory	3
TSEEA2D	Electrical and Electronic System of the Automobile	
	and Laboratory	6
TSFSU3D	Brakes System, Front-End, Alignment of the	
	Automobile and Laboratory	<u>6</u> 29
		29
Complementary Cou	<u>urses</u>	
CSEGU1D	Industrial Safety	1
CICOM3D	Introduction to Computers	3
CCOST3D	Costs and Estimates	<i>3</i>
CC0513D	Costs and Estimates	3 <u>1</u> 5

# **Program Summary**

Total Credit Hours : 36
Total Clock Hours : 720
Program Length : 9 months

# TECHNOLOGY IN INDUSTRIAL ELECTRICITY WITH PLC AND RENEWABLE ENERGY (1,200 CLOCK HOURS / 60 CREDIT HOURS) (15 months)

#### Program Description:

In this program the students use drawings, schematics, and diagrams to perform residential, commercial, industrial electrical installations, and renewable energy systems. AC/DC engine installations are done, by using magnetic controls and pressure buttons stations in single phase and three phase installations in engines and industrial equipment. In addition, students will acquire knowledge on the installation of renewable energy systems. The National Electricity Code and Electric Power Authority Procedures are studied to comply with current requirements. Repairs and maintenance are provided to residential and industrial electrical installations. Specialized tools and equipment is used for some electrical tasks. The students will also learn the safety rules and regulating agencies that apply to this trade; such as: OSHA (Occupational Safety and Health Administration); they will also learn the different State laws of the Electrician profession.

This program also prepares students to work in positions, such as: Electrical Installations Repairer, PLC Programmer, Electrical Installations (Residential/Industrial) Maintenance Technician, Renewable Energy Systems Installer, Refrigeration Technician Assistant, Network Installations, Alarm and Sound Systems Installer, Welder, Transformers Maintenance and Repair Technician, Construction Electrician, Electrical Equipment Adjuster, Manufacturer of Illumination Equipment and of Electrical Appliances, Wholesaler of Electrical Supplies, Manufacturer of Semiconductors and Electronic Components.

#### Program Objective:

The Technology in Industrial Electricity with PLC and Renewable Energy program prepares the student to install, operate, maintain, and repair residential, commercial, and industrial electrical and renewable energy systems. The student will also be prepared to install high and low voltage electrical circuits and components in industrial, commercial, and residential areas. In addition, students will be able to take the Electrician's Helper and Electricians Board Exams, obtain the corresponding licenses, and be able to perform the trade. The students will also learn the safety rules and regulating agencies that apply to this trade; such as: OSHA (Occupational Safety and Health Administration); they will also learn the different State laws of the Electrician profession.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Licensing requirements: During or at the end of the program of study, students or graduates can take the Electrician Helper's Examining Board test. After one year of working in the profession, the Government of Puerto Rico requires that they take Board Exam for Electricity Expert.

### TECHNOLOGY IN INDUSTRIAL ELECTRICITY WITH PLC AND RENEWABLE ENERGY

# **Program: Curricular Content**

# **General Education Courses**

Code	Courses / Classes	<b>Credits</b>
AMATE1D	Applied Mathematics	2
AINGL5D	Technical English	$\frac{2}{4}$
	ç	$\frac{\overline{4}}{4}$
Concentration Cours	<u>es</u>	
TFEER1D	Fundamentals of Electricity and Renewable Energy	3
TRCEN1D	National Electrical Code and Regulations	2
TLIPD1D	Reading and Interpretation of Electrical Blueprints	4
TSIES2D	Underground Electrical Installations Service	3
TIELR2D	Residential Electrical Conduit Installations and Laboratory	5
TEREN2D	Renewable Energy	4
TSDCD3D	Direct Current Systems	3
TPCIL3D	Electrical Panels, Branch Circuits, Transfer Switches	
	and Laboratory	5
TTLAE3D	Transformers, Aerial Lines and Laboratory	3
TCCELL4D	Electrical Circuits and Controls and Laboratory	3
TRMME4D	Repair and Maintenance of Electrical Motors and Laboratory	3
TILEL4D	Electrical Illumination and Laboratory	4
TFUED4D	Fundamentals of Electronics	2
TCPLC5D	Programming Logic Controls (PLC) and Laboratory	4
TGPOT5D	Power Generators	2
TLEOC5D	Occupational Experience Laboratory	4
		54
Complementary Courses		
CSEGU1D	Industrial Safety	1
CCOST3D	Costs and Estimates	$\frac{1}{2}$
		<i>L</i>

# **Program Summary**

Total Credit Hours : 60

Program Length : 15 Months Total Clock Hours : 1,200

# TECHNOLOGY IN REFRIGERATION AND AIR CONDITIONING (1,200 Clock Hours / 60 Credit Hours) (15 months)

#### **Program Description:**

This program has been carefully designed to offer the student the technical knowledge and skills that will prepare him/her to develop at a high-efficiency level as a Refrigeration and Air Conditioning Technician in the private industry or own his/her business.

This occupation requires the Refrigeration and Air Conditioning Technician license.

This program also prepares students to work in positions, such as: Refrigeration and Air Conditioning Technician, Equipment Salesperson, Air Units Installer, Repair of Electrical Appliances, Electrician Assistant, Automotive Air Conditioning Technician, Air Conditioning Maintenance and Repair Technician, Service Advisor, Manufacturing of Ventilation, Heating, AA and Commercial Refrigeration.

#### **Program Objective:**

Upon completion of the program, the student will be prepared with the necessary skills and knowledge to take and approve the Refrigeration and Air Conditioning Technician test, obtain the corresponding license and perform his job wherever needed. He will also have the opportunity for establishing his/her own business. It is expected that the graduate develop a high-efficiency level in all tasks related to the Refrigeration and Air Conditioning Courses.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Licensing requirements: During the course of their program of study and/or when completed, students must take the EPA (Environmental Protection Agency) 608 and 609 Certifications. Once these certifications are passed, graduates can take the Board Exam for Technician in Refrigeration and Air Conditioning.

#### TECHNOLOGY IN REFRIGERATION AND AIR CONDITIONING

# **Program: Curricular Content**

# **General Education Courses**

<u>Code</u>	Courses / Classes	<b>Credits</b>
AMATE4D	Applied Mathematics	2
AINGL1D	Technical English	2
AREHU3D	Human Relations	<u>1</u> 5
Concentration Course	<u>es</u>	5
TFUEL1D	Electricity Fundamentals	3
TFDAC1D	Fundamentals of Refrigeration and Air Conditioning	3
TFMRA2D	Mechanical Fundamentals of Refrigeration and	3
	Air Conditioning	
TRACDL2D	Residential Refrigeration and Air Conditioning	
	and Laboratory	4
TISRA4D	Introduction to Complex Refrigeration and	
	Air Conditioning Systems	2
TRACCL3D	Commercial Refrigeration and Air Conditioning	
	and Laboratory	4
TACIN4D	Industrial Refrigeration and Air Conditioning	_
TO CEY AD	and Laboratory	5
TCCEL3D	Electrical Circuits and Controls and Laboratory	5
TSACOL5D	Air Conditioning System of the Automobile and Laboratory	4
TLIPL1D	Reading and Interpretation of Blueprints	3
TFDEL3D	Electronics Fundamentals	2
TCPLC4D	Programmable Logic Controllers (PLC) and Laboratory	3
TLEXO5D	Occupational Experience Laboratory	<u>6</u>
Complementary Cour	**\$ <i>0</i> \$	47
Complementary Cour	363	
CSEGU1D	Industrial Safety	1
CCOST4D	Costs and Estimates	1
CSOLDL4D	Welding and Laboratory	3
CICOM2D	Introduction to Computers	3 <u>3</u> 8
		8
Program Summary		

#### **Program Summary**

Total Credit Hours : 60

Program Length : 15 Months Total Clock Hours : 1,200

#### TECHNOLOGY IN INDUSTRIAL WELDING (960 CLOCK HOURS / 48 CREDIT HOURS) (12 months)

#### Program Description:

During the study of this program, the student will have the opportunity to relate with the theory and practice of different areas of this course. The student will acquire knowledge and skills necessary for the handling of specialized equipment with which he/she will do different joints and welding types. With this process, the student will weld aluminum, stainless steel, calamine; among others. With electrical arc, the student will do different welding types in industrial piping and will have the opportunity to weld and cut through oxyacetylene process and other related gases.

This program also prepares students to work in positions, such as: Electrical Welder, Acetylene Welder, Metals Cutting, Drawing and Interpretation of Blueprints, Industrial Pipe Welder, Electrician Assistant.

#### Program Objective:

The Technology in Industrial Welding Program prepares the student with the necessary knowledge and skills in the handling of specialized welding; the student will also perform electrical arch welding, cutting with oxyacetylene, and make tasks in aluminum, steel, calamine, and other related metals. The student will be able to establish his/her own business.

#### TECHNOLOGY IN INDUSTRIAL WELDING

Program:	Curricular	Content
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# **General Education Courses**

<u>Code</u>	Courses / Classes	Credits
AMATE1D	Applied Mathematics	2
Concentration Course	<u>s</u>	
TISOL1D TDIPS2D TSPPL1D TSPHL2D TPUSL1D TSPVL2D TSSCL3D TSESL3D TSESL3D TPCMB3D TLEXO4D TSTIL4D	Introduction to Welding Drawing and Interpretation of Welding Blueprints and Symbo Flat Position Welding and Laboratory Horizontal Position Welding and Laboratory Preparation of Welding Joints and Laboratory Vertical Position Welding and Laboratory Over the Head Welding and Laboratory Specialized Welding and Laboratory Cutting Processes, Metal Base Preparation, and Laboratory Occupational Experience Laboratory Industrial Pipe Welding and Laboratory	4 4 4 4 5 2 6
		<u>6</u> 43
Complementary Cours	<u>Ses</u>	
CSEGU3D CCOST5D	Industrial Safety Costs and Estimates	2 <u>1</u> 3

#### **Program Summary**

**Total Credit Hours** 48

12 Months **Program Length** 960

**Total Clock Hours** 

# TECHNOLOGY IN MARINE MECHANICS WITH ELECTRONIC SYSTEMS (1,200 CLOCK HOURS / 60 CREDIT HOURS) (15 months)

#### Program Description:

During the study of this program, the student will learn to diagnose, repair and give the necessary maintenance to different marine vessels used in the industry either commercial or for leisure. The student will learn and apply the use of different tools and necessary equipment within the course to perform the corresponding learning tasks. This program includes the repair and maintenance of different types of engines such as: inboard and outboard (gasoline and diesel). The student will also study everything related to electrical, electronic and computerized systems.

This program also prepares students to work in positions, such as: Boats Selling Advisor, Repair Maintenance and Diagnosis of Marine Vessels, Inboard and Outboard Motors Mechanic, Operator of Electrical, Electronical, and Computerized Systems; Assemblers, Boats Concessionary.

#### Program Objective:

Upon completion of the program, the student will be prepared with the knowledge and skills necessary to work as a Marine Mechanics technician. It is important to obtain the corresponding State License. The student will also have the opportunity to establish his/her own business as soon as the corresponding experience in this field is acquired.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the Examining Board's test.

Optional Licensing requirements: Students from this program will have the option of taking the Automotive Technicians or Automotive Mechanics Board Exam of Puerto Rico.

#### TECHNOLOGY IN MARINE MECHANICS WITH ELECTRONIC SYSTEMS

# **Program: Curricular Content**

# **General Education Courses**

<b>Code</b>	Courses / Classes	Credits	
AMATE1D	Applied Mathematics	2	
AINGL4D	Technical English	2	
AREHU4D	Human Relations	<u>1</u> 5	
		5	
Concentration Courses			
TIMMA1D	Introduction to Marine Mechanics	3	
TIMAR1D	Marine Introduction	3	
TMCIN1D	Internal Combustion Engine and Laboratory	4	
TFDEL2D	Electronics Fundamentals	2	
TSIAC2D	Air Conditioning System and Laboratory	3	
TSICO3D	Computerized Injection System and Laboratory	5	
TSCOL3D	Fuel System (Jet Ski and Outboard) and Laboratory	4	
TSIEL4D	Basic Electrical System	1	
TSCEG4D	Gas Emission and Control System and Laboratory	3	
TSEEA4D	Electrical and Electronic System and Laboratory	5	
TCALA4D	Trailers and Laboratory	3	
TSTFL5D	Power Transmission System and Laboratory	6	
TOCUP5D	Occupational Experience Laboratory	<u>5</u> 47	
		1,	
Complementary Courses			
CSEGU3D	Industrial Safety	1	
CCOST5D	Costs and Estimates	1	
CSOLDL2D	Welding and Laboratory	3	
CICOM1D	Introduction to Computers	<u>3</u> 8	
Dung garage Carrage garage		8	

# **Program Summary**

Total Credit Hours : 60

Program Length : 15 Months Total Clock Hours : 1,200

## TECHNOLOGY IN COLLISION AND AUTO BODY REPAIR (1,200 CLOCK HOURS / 60 CREDIT HOURS) (15 months)

### **Program Description:**

During the study of this program, the student will have the opportunity to acquire the theoretical and practical knowledge of the profession. He/she will also acquire knowledge and skills in handling specialized collision repair equipment and paint mixture. With this process, the student will be capable of handling the automobile's body materials and the chemical process of painting and finishing. The student will also study the vehicle's structure and different quotation and estimation methods.

This program also prepares students to work in positions, such as: Collision Repair Technician, Installer and Repairer of Automobile Window Panes, Paints Technician, Welder, Metal Fabricator, Racing Team Technician, Investigator of Used Parts; Maintenance of Yachts, Furniture, and Articles, Valuer for Insurance Companies.

### Program Objective:

The Technology in Automobile Collision Repair Program offers the student a complete training of advanced techniques in this field. The student will be able to handle bodywork materials of the automobile, the painting and finishing process, and will have the knowledge to make quotations and estimates of the work to be performed. The student will also learn the safety rules and first aid procedures required for this trade, and will be able to establish his/her own business.

The Institution offers reviews for the different programs for which licensure is required; this is carried out at the end of the program. During the program of study, the students are prepared with the necessary skills and knowledge to take the test.

Licensing requirements: The Puerto Rico Automotive Technicians and Automotive Mechanics Examining Board requires graduates from this program to take the Board Exam for Automotive Mechanic or Automotive Mechanic Technician.

This program is offered at all Mech-Tech College's campuses. The Vega Baja and Mayaguez campuses have specialized workshops and equipment for the Laboratory phase of the program. Students matriculated in Caguas and Bayamón will perform specialized laboratories in Vega Baja and students matriculated in Ponce will perform their specialized laboratories in Mayaguez. Students matriculated under the program will a sign a *Certification of Orientation Received* form in the Admissions Office that explains the distribution of days assigned to theory and laboratories at their campus of origin and the days assigned to laboratories in the Vega Baja or Mayaguez campus, respectively; through the form, students also affirm that they have the transportation required to transfer from campus to campus. The following table contains the days to transfer from campus for the specialized laboratories:

Period	Days
First Term	9 days
Second Term	6 days
Third Term	10 days
Fourth Term	12 days
Fifth Term	From 20 to 32 days depending if the Occupational Experience Laboratory will be performed at the campus or at the Practice Center

### TECHNOLOGY IN COLLISION AND AUTO BODY REPAIR

### **Program: Curricular Content**

### **General Education Courses**

<u>Code</u>	Courses / Classes	<b>Credits</b>
AMATE3D	Applied Mathematics	2
AINGL4D	Technical English	
AREHU3D	Human Relations	2 <u>1</u> 5
		<del>-</del> 5
<b>Concentration Cours</b>	<u>es</u>	
TMECA1D	Automotive Mechanics applied to Collision and	
TWEETTE	Auto Body Repair	6
TFBAH1D	Basic Fundamentals of Collision and Auto Body Repair	5
TSOES2D	Specialized Welding and Laboratory	3
TEEST2D	Structural Straightening and Laboratory	6
TCOLO3D	Colorimetry and Laboratory	3
TPREPS3D	Preparation of Surfaces and Laboratory	6
TAPAC4D	Finishing Application and Laboratory	5
TPRPL4D	Plastics Preparation and Repair	4
TPSEE5D	Principles of Electrical and Electronic System	2
TSDRL5D	Repair of Small Damages and Laboratory	2 2
CABTH5D	Basic Administration of the Collision Repair Shop	
TLEXO5D	Occupational Experience Laboratory	<u>6</u>
		50
Complementary Cour	<u>rses</u>	
CSEGU1D	Industrial Safety	1
CCOST4D	Costs and Estimates	1
CICOM2D	Introduction to Computers	<u>3</u>
	•	<u>3</u> 5

### Program Summary

Total Credit Hours : 60

Program Length : 15 Months Total Clock Hours : 1,200

### MOTORCYCLES REPAIR AND MAINTENANCE (48 CREDITS/ 960 HOURS) (12 months)

### **Program Description:**

This course has been designed to provide the student with the technical knowledge and skills required as a motorcycles repair and maintenance technician.

The following areas are studied in this course: 2 strokes and 4 strokes internal combustion, motorcycles electrical and electronic system, lubrication and cooling, transmissions, ignition systems and accessories; among others. Different applications in the industry will also be provided including road motorcycles, sports, racing and tourism.

This program also prepares students to work in positions, such as: Small Engines Technician, Parts Assembler, Motors Repair and Maintenance Technician, Diagnosis, Equipment and Motorcycles Repair, Motorcycles Maintenance, Sale of parts; motorcycles, and equipment.

### **Program Objective:**

Upon completion of this program, the student will be prepared with the necessary skills and knowledge to perform, with a high level of effectiveness, motorcycles repairs and maintenance and that of related equipment.

### MOTORCYCLES REPAIR AND MAINTENANCE

### **Program: Curricular Content**

### **General Education Courses**

<u>Code</u>	Courses/Classes	<u>Credits</u>
AMATE2D	Applied Mathematics	2
AREHU4D	Human Relations	<u>1</u>
		3

### **Concentration Courses**

<u>Code</u>	<u>Courses/Classes</u>	<b>Credits</b>
TIMMO1D	Introduction to Motorcycles Mechanics	3
TMCMP1D	2 strokes and 4 strokes Internal Combustion Engine and Laboratory	5
TSEEMO2D	Electrical and Electronic System and Laboratory	4
TELMO2D	Lubrication and Cooling System and Laboratory	3
TSIGN2D	Ignition Systems	3
TSCCE3D	Fuel and Emission Control Systems and Laboratory	6
TTMOT3D	Transmissions and Laboratory	6
TSFSD4D	Brakes, Suspension, and Direction System and Laboratory	3
TACCE4D	Accessories and Laboratory	<u>5</u>
	•	3

### **Complementary Courses**

<u>Code</u>	<u>Courses/Classes</u>	<u>Credits</u>
CSEGU1D	Industrial Safety	1
CSOLDL4D	Welding and Laboratory	3
CICOM1D	Introduction to Computers	<u>3</u>
		7

### **Program Summary**

Total Credits : 48

Program Length : 12 Months

Total Clock Hours : 960

### TECHNOLOGY IN RACING MECHANICS (48 CREDITS – 960 Hours) (12 months)

#### Program Description:

In this program, the student will learn to diagnose, repair and provide the necessary maintenance to different vehicles prepared for the Racing sport. The students will learn and apply the use of different special tools and equipment to perform learning tasks. This program includes the construction, alteration, repair and maintenance of different types of engines. Different types of fuels used in racing engines will also be used.

The student will also learn the safety rules that apply to this trade and First Aid procedures.

This program also prepares students to work in positions, such as: Engine Diagnosis, Transmissions Repairer, Modification Mechanics, Electromechanics Technician, Installer of Racing Wiring, Salesperson (accessories and racing equipment).

### **Program Objective:**

The Technology in Racing Mechanics Program prepares students for the construction, alteration, repair and maintenance of racing engines; they will also learn different components of racing mechanics which include: chassis, differential, transmissions, and machine shop. With this knowledge they will be prepared to enter the labor market. The student will also learn the safety rules and first aid procedures required for this trade.

Optional Licensing requirements: Students from this program will have the option of taking the Automotive Mechanics test of the Examining Board of Puerto Rico.

### TECHNOLOGY IN RACING MECHANICS

### **Curricular Content**

<u>Code</u>	Courses / Classes	Credits / C	Clock Hours
AMEFO	Racing Measurements and Formulas	2	40
TFDMR	Fundamentals of Racing Mechanics	4	80
TEMMR1	Construction and Modification of Racing Engines I		
	and Laboratory	6	120
TSACL	Racing Fuel Feeding System and Laboratory		
	(Gasoline, Methanol, Nitro, and Turbo)	4	80
TEMMR2	Construction and Modification of Racing Engines II		
	and Laboratory	3	60
TSEEAR	Electrical and Electronic System of the Racing Automobile		
	and Laboratory (Racing Wiring)	4	80
TFMSH	Machine Shop Fundamentals	3	60
TMASH	Machine Shop Work and Laboratory	6	120
TSFL	Brakes System in Racing Automobiles and Laboratory	3	60
TCCSL	Chassis Construction, Suspension, and Laboratory	3	60
TTFLR	Power Transmission and Laboratory		
	(Differential, Axle, Pinion, Automatic, and Manual)	4	80
CSOLDL	Welding and Laboratory	3	60
CICOM	Introduction to Computers (Laptop)	3	60
	with Racing Applications		

### **Program Summary**

Total Credits : 48

Program Length : 12 months Total Clock Hours : 960 hours

## AUDIOVISUAL TECHNOLOGY AND SECURITY SYSTEMS (720 HOURS - 36 CREDITS) (9 months)

### **Program Description:**

The Audiovisual Technology and Security Systems Program has been designed to provide the student with the necessary skills to solve situations that may arise with alternate and direct current circuits and the conduct of semiconductors in different stages and will work with situations related to digital circuits. The program allows the design and installation of domestic, commercial, and industrial alarms; reading and interpretation of electrical blueprints and scale drawings; installation techniques of different types of audio, video, and sound equipment and identify and repair its failures.

By learning and applying the knowledge and skills provided with the study of the Technology in Alarm, Sound, and Security Systems Program, the graduate will be able to establish his/her own business.

This program also prepares students to work in positions, such as: Security Systems Installer and Repairer, Alarm Technician, Security Alarms Technician, Security and Surveillance Technician, Security Systems Technician, Commercial Alarms Installer, Domestic Alarms Installer, and Industrial Alarms Installer.

### Program Objective:

Once the Audiovisual Technology, and Security Systems Program is completed, the graduate will be prepared with the knowledge and skills required to compete in this highly technological and constantly growing field. The graduate will also be able to become employed as a related service provider and/or establish his/her own business. As students, they will have the opportunity to work with tools and materials for installing, repairing, and wire electrical systems, audio equipment, video, alarms and security which apply to domestic, commercial, and industrial markets as well as mobile and automobiles.

### AUDIOVISUAL TECHNOLOGY AND SECURITY SYSTEMS

### **Program: Curricular Content**

### **General Education Courses**

<u>Code</u>	<u>Courses/Classes</u>	<u>Credits</u>
AMATE1	Applied Mathematics	2
AINGL1	Technical English	$\frac{2}{4}$
Concentration Co	<u>purses</u>	
TFUEL1	Fundamentals of Electricity	3
TFDA11	Fundamentals of Electronics (A/C and D/C) and Laboratory	4
TSOEL2	Welding for Electronics	2 4
TCLDG2	Digital Logic Circuits and Laboratory	4
TCRIA2	Commercial, Residential, and Industrial Alarms	3
TLIPE3	Reading and Interpretation of Blueprints and Electronic Drawings	3
TIEAVS3	Installation of Electronic Equipment:	
	Audio, Video, and Security	4
TISES3	Installation of Electronic Security Systems	3
TREEA3	Repair of Audio Equipment	3 <u>2</u> 28
Complementary (	<u>Courses</u>	
CSEGU1	Industrial Safety	1
CICOM2	Introduction to Computers	<u>3</u> 4

### **Program Summary**

Total Credits : 36

Program Length : 9 Months Total Clock Hours : 720



# BRANCH CAMPUS OF ORLANDO, FLORIDA

### TECHNOLOGY IN DIESEL MECHANICS (48 CREDITS – 960 Hours) (12 months)

### **Program Description:**

In this program the student will learn to repair and provide maintenance to vehicles and diesel equipment by using special tools, equipment and precision instruments. Failures in diesel engines are diagnosed; they are disassembled, examined, and defective parts are replaced. Other engine systems are studied, such as: injectors systems, hydraulic systems, combustion systems, brakes systems, and power transmissions systems.

The student will also learn the safety rules that apply to this trade.

This program also prepares students to work in positions, such as: Industrial Equipment Repair Technician, Welder, Racing Team Technician, Motorcycles Mechanic, Performance Engine Tuning, Service Advisor, Parts Department Employee, or establish their own business.

### Program Objective:

The Technology in Diesel Mechanics Program has been designed to offer the student a complete training of the most advanced techniques in the Diesel Mechanics field; it also provides training in diagnosis and repair of diesel engines. The student will have the capability of working with injection systems, brakes systems, hydraulic system, and transmission system, and will also learn the safety rules and first aid procedures required for this trade.

### TECHNOLOGY IN DIESEL MECHANICS

### **Curricular Content**

<u>Code</u>	<u>Courses / Classes</u>	Credits /	Clock Hours
AMEFO	Diesel Measurements and Formulas	2	40
AREHU	Human Relations	1	20
TIMDI	Introduction to Diesel Mechanics	3	60
TCID1	Diesel Internal Combustion Engine I and Laboratory	6	120
TCID2	Diesel Internal Combustion Engine II and Laboratory	5	100
TTFDI	Diesel Power Transmission System and Laboratory	4	80
TFDEL	Fundamentals of Electronics	2	40
TDCCS	Diesel Climate Control System and Laboratory	3	60
TSEDI	Diesel Electrical and Electronic Systems and Laboratory	3	60
TSRFD	Diesel Wheels and Brakes Systems and Laboratory	3	60
TELDI	Diesel Cooling and Lubrication Systems and Laboratory	3	60
TSHIN	Diesel Hydraulic and Pneumatic Systems and Laboratory	3	60
TSIEDL	Diesel Injection System and Laboratory	6	120
CICOM	Introduction to Computers	3	60
CSEGU	Industrial Safety	1	20

### **Program Summary**

Total Credits : 48

Program Length : 12 months Total Clock Hours : 960 hours

## TECHNOLOGY IN INDUSTRIAL WELDING (48 CREDITS – 960 Hours) (12 months)

### **Program Description:**

During the study of this program, the student will have the opportunity to relate with the theory and practice of different areas of this course. The student will acquire knowledge and skills necessary for the handling of specialized equipment with which he/she will do different joints and welding types. With this process, the student will weld aluminum, stainless steel, calamine; among others. With electrical arc, the student will do different welding types in industrial piping and will have the opportunity to weld and cut through oxyacetylene process and other related gases.

The student will also learn the safety rules that apply to this trade and First Aid procedures.

This program also prepares students to work in positions, such as: Electrical Welder, Acetylene Welder, Metals Cutting, Drawing and Interpretation of Blueprints, Industrial Pipe Welder, Electrician Assistant, or establish their own business.

#### Program Objective:

The Technology in Industrial Welding Program prepares the student with the necessary knowledge and skills in the handling of specialized welding; the student will also perform electrical arch welding, cutting with oxyacetylene, and make tasks in aluminum, steel, calamine, and other related metals. The student will also learn the safety rules and first aid procedures required for this trade, and will be able to establish his/her own business.

### TECHNOLOGY IN INDUSTRIAL WELDING

### **Curricular Content**

Code	<u>Courses / Classes</u>	Credits / C	Clock Hours
AMEFO	Welding Measurements and Formulas	2	40
TISOL	Introduction to Welding	2	40
TDIPS	Drawing and Interpretation of Blueprints and		
	Welding Symbols	4	80
TSPPL	Flat Position Welding and Laboratory	4	80
TFUEL	Fundamentals of Electricity	2	40
TSPHL	Horizontal Position Welding and Laboratory	4	80
TPUSL	Preparation of Welding Joints and Laboratory	2	40
TSPVL	Vertical Position Welding and Laboratory	4	80
TSOAL	Welding and Cutting with Oxyacetylene and Laboratory	4	80
TSSCL	Over the Head Welding and Laboratory	4	80
TSESL	Specialized Welding and Laboratory	5	100
TSTIL	Industrial Piping Welding and Laboratory	6	120
CSEGI	Industrial Safety	2	40
CCOST	Costs and Estimates	1	20
TFDEL	Fundamentals of Electronics	2	40

### **Program Summary**

Total Credits : 48

Program Length : 12 months Total Clock Hours : 960 hours

### TECHNOLOGY IN RACING MECHANICS (48 CREDITS – 960 Hours) (12 months)

#### Program Description:

In this program, the student will learn to diagnose, repair and provide the necessary maintenance to different vehicles prepared for the Racing sport. The students will learn and apply the use of different special tools and equipment to perform learning tasks. This program includes the construction, alteration, repair and maintenance of different types of engines. Different types of fuels used in racing engines will also be used.

The student will also learn the safety rules that apply to this trade and First Aid procedures.

This program also prepares students to work in positions, such as: Engine Diagnosis, Transmissions Repairer, Modification Mechanics, Electromechanics Technician, Installer of Racing Wiring, Salesperson (accessories and racing equipment).

### **Program Objective:**

The Technology in Racing Mechanics Program prepares students for the construction, alteration, repair and maintenance of racing engines; they will also learn different components of racing mechanics which include: chassis, differential, transmissions, and machine shop. With this knowledge they will be prepared to enter the labor market. The student will also learn the safety rules and first aid procedures required for this trade.

### TECHNOLOGY IN RACING MECHANICS

### **Curricular Content**

<u>Code</u>	Courses / Classes	Credits / C	Clock Hours
AMEFO	Racing Measurements and Formulas	2	40
TFDMR	Fundamentals of Racing Mechanics	4	80
TEMMR1	Construction and Modification of Racing Engines I		
	and Laboratory	6	120
TSACL	Racing Fuel Feeding System and Laboratory		
	(Gasoline, Methanol, Nitro, and Turbo)	4	80
TEMMR2	Construction and Modification of Racing Engines II		
	and Laboratory	3	60
TSEEAR	Electrical and Electronic System of the Racing Automobile		
	and Laboratory (Racing Wiring)	4	80
TFMSH	Machine Shop Fundamentals	3	60
TMASH	Machine Shop Work and Laboratory	6	120
TSFL	Brakes System in Racing Automobiles and Laboratory	3	60
TCCSL	Chassis Construction, Suspension, and Laboratory	3	60
TTFLR	Power Transmission and Laboratory		
	(Differential, Axle, Pinion, Automatic, and Manual)	4	80
CSOLDL	Welding and Laboratory	3	60
CICOM	Racing Computer Programming	3	60

### Program Summary

Total Credits : 48

Program Length : 12 months Total Clock Hours : 960 hours

### AUTOMOTIVE MECHANICS (48 CREDITS – 960 HOURS) (12 months)

#### **Program Description:**

This program has been designed to provide the student with the required knowledge and skills to be able to work in this profession.

The following areas are studied: carburetion, internal combustion, electric and electronic system, front end and transmission. The program offers an academic formation and integrates intellectual, technical and human aspects and makes use of modern tools and equipment used in this profession.

The program also prepares students to work in positions such as: automotive mechanic, light mechanics, alignment, motorcycles mechanic, parts department employee.

The student will also learn the safety rules that apply to this trade and First Aid procedures.

### Program Objective:

The Automotive Mechanics program prepares students with the necessary knowledge and skills to inspect, maintain, and repair cars and light trucks. They will also use computerized shop equipment and work with electronic components while maintaining their skills with traditional hand tools; they will also perform hands-on practice and laboratories as well as learn tasks related to automobiles' parts and tools.

### **AUTOMOTIVE MECHANICS**

### **Program: Curricular Content**

### **General Education Courses**

<b>Code</b>	Courses / Classes	Credits /	Clock Hours
AMATE	Applied Mathematics	2	40
AREHU	Human Relations	1	20
TIMAU	Introduction to Automotive Mechanics	3	60
TMCI1	Internal Combustion Engine of the Automobile and Laborator	ry 5	100
TSCOAL	Fuel System of the Automobile and Laboratory	3	60
TCEGL	Gas Emission and Control System of the Automobile		
	and Laboratory	3	60
TSEEA	Electrical and Electronic System of the Automobile		
	and Laboratory	6	120
TSFTA	Breaks System, Front-End, Alignment of the		
	Automobile and Laboratory	5	100
TSACA	Air Conditioning System of the Automobile		
	and Laboratory	4	80
TSEJA	Computerized Injection System of European, Japanese,		
	and American Automobiles and Laboratory	6	120
TSTFUL	Power Transmission System of the Automobile		
	and Laboratory	6	120
CSEGU	Industrial Safety	1	20
CICOM	Introduction to Computers	3	60

### Program Summary

Total Credit Hours : 48 Total Clock Hours : 960

Program Length : 12 months

### 6.4 COURSE DESCRIPTIONS

#### 6.4.1 ASSOCIATE DEGREE

### ASSOCIATE DEGREE IN AUTOMOTIVE MECHANICS TECHNOLOGY

TGPMA1 - Principles of Automotive Mechanics – 3 Credits Lecture hours – 60 Pre-requisites - None

This course provides basic knowledge of the operation of the different systems in a motor vehicle. The course clearly presents valves, connecting rods, crankshaft, pistons, cylinder blocks and other systems, working in a well-articulated and highly precise manner.

TGMCL2 - Internal Combustion Engine and Laboratory - 6 Credits Lecture - 40 hours/Laboratory - 80 hours Pre-requisites -TGPMA

This course provides broad knowledge of the internal and external operation of an engine and engine repair. The different technological diagnostic methods will also be discussed with regard to their use in repairing internal combustion engines.

TGSICL3 - Fuel Injection System and Laboratory – 3 Credits Lecture – 20 hours/Laboratory – 40 hours Pre-requisites –TGMCL, TGPMA

This course clearly presents the principles of fuel injection. Fuel processes and the different kinds of fuel use in automobiles are explained. Mechanical fuel injection is discussed.

TGSEL4 - Electrical and Electronic System of the Automobile and Laboratory – 3 Credits

Lecture – 20 hours/Laboratory – 40 hours

Pre-requisites -TGPMA

This course includes the basic concepts of electricity and electronics in automobile systems. Trade terms and technological advances are presented as well as the systems that use electricity and electronics. The course also presents theory, mathematics, and physics as related to the proper operation of vehicles.

TGSIL4 - Electronic Injection System and Laboratory – 6 Credits Lecture – 40 hrs./Laboratory – 80 hrs Pre-requisites –TGPMA, TGMCL

Automotive injection systems have undergone many changes and this is due to the requirements of large environmental protection agencies. Electronics and computers are major changes in these systems. This course covers technological advances and explains changes and variation and the different ways to diagnose each type of electronic injection system.

### TGSAC5 - Air-Conditioning System of the Automobile and Laboratory – 3 Credits Lecture – 20 hrs/Laboratory – 40 hrs

#### **Pre-requisites –TGPMA, TGSEL**

This course provides basic knowledge of the operation of air conditioning systems as well as technological advances related to electronic and computerized control of air conditioning systems in vehicles.

### TGSDL5 – Direction, Suspension, Brakes System, and Laboratory – 3 Credits Lecture – 20 hrs/Laboratory – 40 hrs Pre-requisites -TGPMA

This course provides knowledge of the operation, diagnosis, and relationship of the steering, suspension and brake systems. Importance is given to how the systems work separately and in coordination. The course also presents technological advances in the systems in terms of computerized controls.

TGIHI5 - Hydraulic Impulse - 3 Credits Lecture - 20 hrs/Laboratory - 40 hrs Pre-requisites -TGPMA, TGSEL, AGMAT

This course presents the basic principles of hydraulic drives (fluid mechanics) in a clear and simple fashion. Hydraulic systems used in automobiles and their applications are explained.

## TGTFL6 - Power Transmission System, Differential and Laboratory – 3 Credits Lecture – 20 hrs/Laboratory – 40 hrs Pre-requisites –TGPMA, TGMCL, TGSEL

One of the most important systems for engines is the power transmission system. The operation of the vehicle basically depends on transmission of power from the engine to the wheels. The transmission of power occurs through a configuration of gears and computer-controlled hydraulic and electronic components. The systems and their operation will be discussed as a whole as well as diagnosis and repair of each system and its components.

### TGFMD6 - Principles and Function of Diesel Engines – 3 Credits Lecture – 20 hrs/Laboratory – 40 hrs Pre-requisites –TGPMA, TGSIL

This course clearly presents the principles of diesel engine operation. Basic aspects such as injection, lubrication and cooling systems, engine building, turbochargers, and peripheral systems are discussed.

TGPAT7 - Advanced Practice in Automotive Technology – 6 Credits Laboratory hrs – 120 Pre-requisites –TGPMA, TGMCL, TGSIL, TGSEL, TGSDL, TGTFL This course provides students with the opportunity to practice subject matter of previous courses. The shop environment is recreated where students will work like responsible members of the profession.

TPRIN8 – Practice in the Industry – 6 credits Practice hours – 120 Pre-requisites – TGPMA, TGMCL, TGSICL, TGSEL, TGSIL, TGSAC, TGSDL, TGTFL, TGPAT

Practice in the industry is an educational process which offers studens the opportunity of evaluating if the knowledge and skills acquired are sufficient and adequate to develop in the professional and technical field they have chosen to study. The learning process allows the student to integrate in a practical and effective way the theory and practice of what has been learned in technical and academic classes.

#### ASSOCIATE DEGREE IN TECHNOLOGY IN MECHANICAL ENGINEERING

TGDIT1 - Technical Drawing - 3 Credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites - None

This course provides an introduction to basic concepts and terminology of the Graphic representation of different objects for their analysis and manufacturing. It develops skills in the use of drawing instruments applying pre-established rules for clear exposition of geometrical characteristics and the functionality of an object in particular for its development in the shop. It also provides an introduction to the CAD system.

### TGITIM – Introduction to Technology in Mechanical Engineering – 3 Credits Lecture 60 hrs Pre-requisites – None

The purpose of this course is to present students with an introduction to the Technology in Mechanical Engineering field. The students will be exposed to various general topics related to the program, description, and courses with the purpose of developing basic technical abilities and knowledge. In addition, the following topics will be discussed: ethics, work opportunities, engineering concepts, leadership, and technological advances.

TGPMP2 – Metals and Plastics – 3 Credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites –

This course is based in the application and function of different types of materials knowing the characteristics and properties that these have with the purpose of understanding its behavior. It offers the student the opportunity to know the classification of materials, such as: metals and polymers in a way that he is capable of integrating it into a manufacturing process. It provides to the group the structures to apply techniques or tests for thermal treatment and metal hardening capacity and transformation of polymers starting with its composition.

### TGCAD3 – CAD - SolidWorks® – 3 Credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites –

The CAD course prepares the student with advanced technical principles for scale Drawing and/or design of parts and tools. It also prepares the student on the reading and interpretation of blueprints. This course use the *SolidWorks®* program for computerized } drawing where student will be able to draw in 3D, produce auxiliary views and details, assembly views, and three views.

### TGBAL3 – Bench and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites –

This course is designed for the student to acquire the necessary knowledge and skills for the handling and use of: bench work equipment, hand tools and measuring and precision instruments. The student will make use of mathematical formulas, conversion of measuring systems, and tracing of metals by reading a blueprint for cutting and finishing the part with the corresponding hand tools. The student will apply basic formulas (RPM, TDS) to execute operations with the drill and applying safety rules in the shop.

### TGTOML4 – Metal Lathe and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs Pre-requisites –

This course has been designed for the student to acquire the necessary knowledge for handling a metal lathe as a tool machine, performing different tasks and applying mathematical skills required for problem solving and in the execution of different projects which function is to polish the basic skills that are necessary for the industry.

### TGMEC5 – Common Market – 2 Credits Lecture 40 hrs Pre-requisites –

In this course, the student will have a panoramic visión of how the common currency and foreigh currency market works when purchasing tolos, equipment, and services in and out of the country. The student will also acquire knowledge on how the financial and currency exchange system work in the international market.

### TGFRE5 – Milling and Laboratory – 3 Credits Lecture 30 hrs/Laboratory 50 hrs Pre-requisites –

This course has been designed for the student to acquire the necessary knowledge and skills for handling and using a milling. During the course, the student will execute a variety of projects to polish his abilities when handling a milling to be able to comply with industry demands. When performing the operations, the student will apply technical information related to the machine's mechanism; RPM, TDS, and advance; among others.

### TGFRAV6 – Advanced Fabrication Techniques – 3 Credits Laboratory 20 hrs/Laboratory 40 hrs Pre-requisites –

This course emphasizes the methodology to be used in the procedures of advanced operations in millings and rectifiers. The student will acquire knowledge and skills required in this area so that he can develop individualized techniques that are required to compete in the industry. It provides students the opportunity to develop and/or create projects and useful tools by considering adequate materials and formulas required in the fabrication process.

### TGDTR6 – Dies Design and Construction and Laboratory – 6 Credits Lecture 40 hrs/Laboratory 80 hrs Pre-requisites –

This course has been structured to provide the student with the knowledge of principles and applications of a die and its design. The laboratory is guided towards fabricating a die by applying CAD (*SolidWorks*®) for the graphic design and mechanization processes by using machine tools (die, milling, rectifier, drill) for achieving the final product and promoting teamwork, good manufacturing practices, shop safety, and blueprints interpretation.

### TGSCL7 – CNC and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites –

This course has been designed so that student understands CNC (Computerized Numerical Control); the student will learn how to prepare manual and computerized programs, the system's language, and how to calculate coordinates in a Cartesian or rectangular blueprint. He student will work with the *G Code* numerical language and will prepare programs to beg used by this machine, will design and work on parts by using angles and radios in milling as well as in CNC.

### TGHNE7 – Hydraulics and Pneumatics – 3 credits Lecture 20 hrs/Laboratory 40 hrs Pre-requisites –

This course has been designed to provide the student the necessary knowledge to comprehend, modify, and repair hydraulic and pneumatic systems of industrial machinery that is used for manufacturing procedures. The knowledge to interpret and understand pneumatic symbols is offered in a given drawing. The student will also work with pneumatic symbols to create a system and solve pneumatic situations; failures and errors will be identified in any hydraulic or pneumatic system.

# TPRIN8 – Practice in the Industry – 6 credits Practice hours – 120 Pre-requisites – TGBAL, TGTAL, TGTML, TGLDM, TGFRL, TGREL, TGDTR, TGLTR

Practice in the industry is an educational process which offers studens the opportunity of evaluating if the knowledge and skills acquired are sufficient and adequate to develop in

the professional and technical field they have chosen to study. The learning process allows the student to integrate in a practical and effective way the theory and practice of what has been learned in technical and academic classes.

### ASSOCIATE DEGREE IN TECHNOLOGY IN ELECTRICAL ENGINEERING

### TGFEER1 – Fundamentals of Electricity with Renewable Energy and Laboratory – 3 Credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites - None

This course studies the solution of problems in AC/DC circuits and the familiarization of basic electricity conceptos, such as: magnetism and electrical energy generation.

### TGIEL2 - Residential Electrical Installations and Laboratory - 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites -TGFEER

This course prepares students to install residential electrical wiring, ground and exposed, to diagnose electrical problems, and perform necessary repairs according to the National Electrical Code and the Puerto Rico Electric Power Authority.

### TGDIT3 - Technical Drawing – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs

The subject matter of this course has been organized to provide a more significant role for draftsmanship training. Students will learn and develop skills in the use of the industrial graphic language and the application and construction of geometrical figures.

### TGSIL3 - Illumination Systems and Laboratory— 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites—TGIEL

This course recognizes the importance of luminaries in the field of electricity and discusses the elements and components of modern luminaries. Covers measurement for proper operation of the system.

## TGMML4 - Maintenance of Electrical Motors and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, AGMAG, AGMAT, AGFIT

The course provides basic knowledge of maintenance and repair of single and three phase DC and AC electrical motors.

TGCEL4 – Circuits and Electrical Controls and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGIEL This course provides students with knowledge and skills related to totally automatic control systems, analysis and diagnosis of electric circuit failures, installation of single station and intermittent controls and rotary inverters.

### TGRCE5 - National Electrical Code and Regulations – 3 Credits Lecture 60 hrs/Outside the Classroom Work 15 hrs Pre-requisites – None

It is well-known that working with electricity is an occupation involving danger and risk. On occasion there have been fatal accidents. This profession is regulated with a view to reducing hazards and accidents. This course is designed to acquaint students with the laws that regulate the profession so that they can install electric wiring following the standards in the Puerto Rico Electric Power Authority Regulations. and the National Electrical Code, as the Licensed Electrician assumes full responsibility of wiring installed or certified.

### TGPLC5 - Principles of Combinational Logic – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGIEL, TGCEL

In this course students become acquainted with mathematical concepts, the different number systems of Boolean algebra. In addition, students study the operation and combinational and sequential circuits used in this technology.

### TGIPL5 – Installation of Electrical Panels, Branch Circuits, Transfer Switches and Laboratory - 3 Credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGIEL

This course provides basic knowledge for installation and repair of meter bases, electric panels, and measurement equipment in household and industrial scenarios according to Puerto Rico Electric Power Authority Regulations and the National Electrical Code.

### TGLPE6 - Reading of Schematic Drawings – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGIPL, TGDIT

This course provides students with the basic knowledge needed for reading and interpreting residential and industrial electricity schematics so that students will be able to gather load information according to the blueprint or schematic specifications.

### TGINS6 – Instrumentation – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGDIT, TGIPL, TGCEL, TGIEL

The course provides basic knowledge of measuring instruments and their correct use in electrical systems and the installation and repair of electrical and electronic circuits. Emphasis is given to the skills needed to diagnose equipment or systems.

## TGLDL6 - Distribution Lines, Transformers and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFEER, TGIPL, TGDIT

Transformers are the most important devices in electricity. Thanks to transformers we can enjoy the benefits of electrical power in our homes and in industry. It is of vital importance that electricians have knowledge of the operation, combinations, and trajectory of distribution lines in power delivery. This knowledge is very important for students who want to serve society as linemen at the Puerto Rico Electric Power Authority (PREPA.) or work at commercial power companies.

## TGCLP7 - Programmable Logic Controllers (PLC) -3 Credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites -TGFEL, TGFEER, TGCEL, TGIPL

In this course students will obtain basic knowledge needed to interpret scale drawings, design and program logic circuits in a PLC. Students will also find failure points and repair programmable controllers.

TPRIN8 – Practice in the Industry – 6 credits Practice hours – 120 Pre-requisites – TGFEER, TGIEL, TGSIL, TGFEL, TGMML, TGCEL, TGRCE, TGIPL, TGLPE, TGLDL

Practice in the industry is an educational process which offers studens the opportunity of evaluating if the knowledge and skills acquired are sufficient and adequate to develop in the professional and technical field they have chosen to study. The learning process allows the student to integrate in a practical and effective way the theory and practice of what has been learned in technical and academic classes.

#### ASSOCIATE DEGREE IN BIOMEDICAL EQUIPMENT REPAIR

### TGTBIOT1 – Introduction to Biomedical Technology and Medical Terminology – 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – None

This course introduces and analyzes medical instrumentation, theory of measurements and basic concepts which will help the student to understand the electro-physiological effects in human beings or in other instruments. The students will also recognize different types of signals as well as relating with devices used to obtain physiological parameter measurements (electrodes, transducers and sensors). The student will explain and study the most common medical terminology used in the repair of biomedical equipment.

TGDIT3 – Technical Drawings – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites - None The material in this course has been gathered to achieve a more significant training of drawings in the learning area. With its study, the student will relate and develop the skills in the use of graphic industrial language and in the application and construction of geometric figures. This course has 40 hours of laboratory contact.

### TGFISIO3 – Applied Physiology for Biomedical Repair Technicians – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGBIOT

This course studies the relation between structure and function of the human body; it also discusses cells and tissue as structural units and basic functions. The course introduces the regulation and integration of body functions and systems control in homeostasis. The course studies major systems such as: nervous, vascular, endocrine and skeletal-muscle; it also integrates the use of biomedical instruments for diagnosis and treatment of live beings

### TGCLDI4 – Digital Logic Circuits and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFUE,TGFDE,AGMAG,AGMAT,AGFIT

This course studies basic digital circuits, such as: logic compartments, adding circuits, coders, binary meters and time circuits. This course has 40 hours of laboratory contact.

### TGEABIL4 – Advanced Biomedical Electronics and Laboratory – 6 credits Lecture 40 hrs/Laboratory 80 hrs/Outside the Classroom Work 30 hrs Pre-requisites –TGFUE,AGMAG,AGMAT, TGFDE

This course has been designed for the student to develop the skills and knowledge in advanced electronics for the diagnosis and solution of problems in electronic control modules in different biomedical equipment. This course has 40 hours of laboratory contact.

### TGLIPL5 – Reading and Interpretation of Schematic Drawings – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGDIT

This course provides the student with the basic knowledge for reading and interpreting residential and industrial electric planes so that the student can make a Charge census according to the plane or sketch specifications. This course has 40 hours laboratory contact.

### TGIMEBI5 – Instrumentation and Biomedical Measurements I 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –AGMAG, AGMAT, AGFIT, TGFUE, TGFDE, TGEABIL, TGFISIO

This course offers an introduction to instrumentation and biomedical measuring systems, transducers and electronic amplifiers. It studies bioelectrical signals (ECG, EMG, and EEG), cardiovascular measurement system, respiratory measurement system, non-

invasive blood pressure, defibrillators', pacemaker and clinical instrumentation. This course has 40 hours laboratory contact.

TGCLSEC5 – Sequential Logic Circuits and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –AGMAG, AGMAT, AGFIT, TGFUE, TGFDE, TGCLDI

This course has been designed for the student to develop the cognitive knowledge in Sequential Digital Electronics with the purpose of diagnosis and solving problems in modules and electronic control cards used in different units of medical equipment. This course has 40 hours laboratory contact.

TGIMEBI26 – Instrumentation and Biomedical Measurements II 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – AGMAG, AGMAT, AGFIT, TGFUE, TGFDE, TGEABIL, TGFISIOL

This course studies advanced biomedical measurements in respiratory therapy, EEG, ECG, telemetry, surgical, electrosurgery, X-Rays, Fluoroscopy, CT Scan, MRI and nuclear Medicine. This course has 40 hours laboratory contact.

TGQIN6 – Industrial Chemistry for Health Sciences: Hygiene and Safety – 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGFUE, TGTBIOT, TGFDE

This course details industrial safety, specially electrical, as a fundamental aspect where special importance is required for medical equipment. The course develops the student with different types of knowledge referring to standards and regulations related to electrical safety. Different directives that affect electrical safety and currents in live beings are also analyzed. This course also studies specific techniques to design and develop electronic products and studies policies that apply to different products, such as: electrodomestic, medical equipment and industrial equipment.

This course also studies chemistry principles with the purpose of providing the student with basic knowledge in this field.

 $TGTING6-Biomedical\ Engineering\ Techniques\ (Computers\ in\ Biomedical\ Equipment)-3\ credits$ 

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – CGCOM, TGIMEBI

This course studies basic computers terminology and its use and integration of biomedical equipment. It also describes types of computers, microprocessors and microcomputers used in biomedical instrumentation. In his course, the use of internet will be learned as a reference to health care. This course has 40 hours laboratory contact.

TGROBO7 – Robotics and Laboratory – 2 credits Lecture 10 hrs/Laboratory 30 hrs/Outside the Classroom Work 10 hrs Pre-requisites – AGMAG, AGMAT, AGFIT, TGFUE, TGFDE, TGEABIL This course has been designed to prepare the student with the necessary knowledge and skills to comprehend, modify and repair industrial automation machinery (industrial robotics) used in manufacturing procedures and for increasing production. This course has 40 hours laboratory contact.

TGCLP7 – Programmable Logic Controllers (PLC) – 4 credits Lecture 30 hrs/Laboratory 50 hrs/Outside the Classroom Work 20 hrs Pre-requisites –TGFDE, TGFUE, TGEABIL, AGMAG, AGMAT, AGFIT

In this course the student will have the basic knowledge for interpreting scaled blueprints, design and program logic circuits on a P.L.C. He/she will also be able to look for failures and repair the programmable control systems. This course has 40 hours of laboratory contact.

TGARIML7 – Application and Repair of Medical Instruments and Laboratory (Troubleshooting) – 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – AGMAG, AGMAT, AGFIT, TGFUE, TGFDE, TGIMEBI

In this course, the student will relate directly with medical and test equipment used to diagnose failures in medical equipment. It studies different handling options for the maintenance of medical equipment in hospitals, emergency medical services and medical practice. Different types of maintenance and repair organizations (MROs) will work with these problems. This course has 40 hours of laboratory contact.

TGSEMBI7 – Seminar in Biomedical Applications – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites –TGRBIOT, CGCOM

This course integrates essential competencies to develop as Biomedical Equipment Repair Technician. It also analyzes challenges that confront these technicians in relation to: general practices, ethics and project management.

TPRIN8 – Clinical Practice (Rotations) – 6 credits
Practice hours – 120
Pre-requisites – TGTBIOT, TGFISIO, TGEABIL, TGIMEBI, TGIMEBI2, TGQIN,
TGTING, TGARIML

This course offers students the opportunity of evaluating if the knowledge and skills acquired are sufficient and adequate to develop in the professional and technical field they have chosen. The learning process allows the student to integrate in a practical and effective way the theory and practice of what has been learned throughout the program.

### ASSOCIATE DEGREE IN INDUSTRIAL ELECTROMECHANICAL TECHNOLOGY

### TGIEIN1D – Introduction to Industrial Electromechanics – 3 credits Lecture 60 hrs/Outside the Classroom Work 15 hrs Pre-requisites – None

Electromechanics is a specialized field where knowledge and applications in electricity, lectronics and mechanics are applied. The application of concepts in these fields can be observed through domestic, commercial and automotive applications, specially in the industrial field. Through this course the student will learn different concepts of the industrial electromechanics field.

### TGFEER3 – Fundamentals of Electricity with Renewable Energy and Laboratory – 3 Credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites - None

This course studies the solution of problems in AC/DC circuits and the familiarization of basic electricity conceptos, such as: magnetism and electrical energy generation.

### TGDIT3D – Technical Drawings – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – None

The material in this course has been gathered to achieve a more significant training of drawings in the learning area. With its study, the student will relate and develop the skills in the use of graphic industrial language and in the application and construction of geometric figures. This course has 40 hours of laboratory contact.

### TGMEGEN3D – General Mechanics (Machinery and Tools) – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, AGMAG, AGMAT, TGFEER

This course has been designed to prepare the student with the necessary knowledge to understand concepts in the industrial electromechanics field.

### TGMML4D – Maintenance of Electrical Motors and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER

This course provides the basic knowledge for maintenance and repair of electric motors DC and AC, monophasic and triphasic. This course has 40 hours of laboratory contact.

### TGCEL4D – Circuits and Electrical Controls and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGFEER, AGMAG, AGMAT, AGFIT

This course provides the student the skills and knowledge of automatic control systems, analysis and diagnosis of failures, installation of controls with single stations, intermitent and with rotation. This course has 40 hours of laboratory contact.

### TGPLC5D – Principles of Combinational Logic and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, AGMAG, AGMAT, AGFIT, TGFEL

In this course the student relates to the mathematical concepts, in other words, the different algebraic numeric systems. He/she will also study its function, analize combined circuits and sequences of this technology. This course has 40 hours of laboratory contact.

TGHNE5D – Hydraulics, Pneumatics and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGMEGEN, TGMML, TGFEL, AGFIT, AGMAG, AGMAT, TGFEER

This course has been designed to recognize neumatic and hydraulic machines problems and to design neumatics and hydraulics programs to be able to create a system that will benefit the production in a company. This course has 40 hours of laboratory contact.

### TGIPL5D – Installation of Electrical Panels, Branch Circuits, Transfer Switches and Laboratory – 3 credits

Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – AGMAT, AGFIT, TGFEER, TGFEL, TGCEL, TGMML

This course provides the basic knowledge for the installation and repair of base meters, electric panels and measuring equipment for domestic and industrial settings, according to A.E.E. Regulations and the National Electricity Code. This course has 40 hours of laboratory contact.

TGLPE6D – Reading of Schematics Drawings – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, TGDIT

This course provides the student with the basic knowledge for reading and interpreting residential and industrial electrical sketches so that the student can make a Charge census according to the sketch specifications. This course has 40 hours laboratory contact.

TGINS6D – Instrumentation – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, TGDIT

This course provides basic knowledge regarding the correct use of measuring instruments in electrical systems for the installation and repair of electrical and electronic circuits. The course also emphasizes the necessary skills for equipment and systems diagnosis.

### TGRACL6D – Refrigeration and Air Conditioning System and Laboratory – 3 credits

### Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, TGDIT

In this course, the student will develop cognitive knowledge in industrial refrigeration systems. The student will diagnose and solve basic problems in an industrial refrigeration unit. This course has 40 hours of laboratory contact.

### TGCLP7D – Programmable Logic Controllers (PLC) – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, TGDIT, TGINS, TGFEL

In this course, the student will learn the basic knowledge for interpreting scaled blueprints, design and program logic circuits on a P.L.C. He/ she will also be able to look for failures and repair the programmable control systems. This course has 40 hours of laboratory contact.

### CGSOB7D – Welding, Metallurgy and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER

The purpose of the Industrial is to train young adults and adults of both genders with the necessary knowledge and skills to be able to weld. During the teaching-learning process, the student will have the opportunity to know and handle electric arc welding machines, oxyacetylene equipment and specialized welding. He/she will identify and use the tools and necessary equipment to execute the process as well as knowing and applying the safety measures necessary and important to every welder. This course has 40 hours laboratory contact.

### TGIROB7D – Robotics and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs/Outside the Classroom Work 15 hrs Pre-requisites – TGIEIN, TGFEER, TGDIT, TGINS, TGFEL

This course has been designed to prepare the student with the necessary knowledge and skills to comprehend, modify and repair industrial automation machinery (industrial robotics) used in manufacturing procedures and for increasing production. This course has 40 hours laboratory contact.

# TPRIN8 – Practice in the Industry – 6 credits Practice hours – 120 Pre-requisites – TGIEIN, TGFEER, TGMEGEN, TGFEL, TGMML, TGCLP, TGIROB, TGPLC, TGIPL, TGCEL

Practice in the industry is an educational process which offers studens the opportunity of evaluating if the knowledge and skills acquired are sufficient and adequate to develop in the professional and technical field they have chosen to study. The learning process allows the student to integrate in a practical and effective way the theory and practice of what has been learned in technical and academic classes.

### ASSOCIATE DEGREES – GENERAL COURSES

#### **AGEBI1 - Basic Spanish I – 3 Credits**

The Spanish 101 course is one of the general education courses offered at Mech Tech in Caguas, Puerto Rico. In this course students will have the opportunity to develop basic skills needed in effective interpersonal communication.

### AGEBII2 - Basic Spanish II – 3 Credits Lecture 60 hrs Pre-requisites –AGEBI

This course is designed as a continuation of Spanish 101 and like the previous course, it is a requirement for all students of almost all of programs at the institution. Content differs from the prerequisite course that emphasizes grammar and practical use of language. Spanish 102 focuses on studying the principal literary genres (poetry, stories, essays and theater) and studying the creative process of these literary works.

### AGIBI3 – Basic English I – 3 credits Lecture 60 hrs

Basic English 101 is designed to provide students with intensive oral and written practices using selected ESL structures. Its goal is to help students learn to use the language in grammatical structures and reinforce oral and written communication skills related to the technical vocabulary and of shop vocational trades.

### AGIBII3 – Basic English II – 3 credits Lecture 60 hrs

Basic English 102 is an extension of English 101. Its purpose is to provide additional oral and written practices using using ESL structures to improve communication skills. A technical to improve communication skills. A technical component will able students to read and analyze technical texts. This course will also provide practice in producing business letters, reports, memos, forms, and checks.

### AGMAG1 - General Mathematics – 3 Credits Lecture 60 hrs

This course provides basic knowledge so that students can reinforce fundamental mathematical concepts, reasoning skills, problem solving, and numeric awareness. The course addresses the need to strengthen mathematical knowledge and skills required for successful performance in the workplace and in other courses of study.

### AGMAT2 - Technical Mathematics – 3 Credits Lecture 60 hrs Pre-requisites –AGMAGI

The course focuses on developing students' ability to reason, solve problems, and apply knowledge to technical processes. The course provides a basis for working with trigonometry and analytical geometry, which by their nature are applicable to many areas of knowledge. Students will apply the necessary theory and basic tools needed to successfully solve most of the problems he or she will face in a technical career.

## $\begin{array}{l} AGSCMI1-Systems\ and\ Concepts\ for\ Shop\ Measurements\ I-3\ credits\\ Lecture\ 60\ hrs\\ Pre-requisites \end{array}$

This course provides opportunities for the student to develop, clarify, and reinforce general mathematical concepts such as mathematical skills, reasoning abilities, problem

solving, and numerical sensibility. The course responds to the need of strengthening the basic knowledge and mathematical skills required in all areas of study, the workforce, and daily life. The topics presented are: numerical groups, arithmetic operations, measuring systems, numerical relations and basic mathematical concepts to recognize, understand, interpret, and analyze algebra as a universal communication language.

### AGSCMII2 – Systems and Concepts for Shop Measurements II – 3 credits Lecture 60 hrs Pre-requisites – AGSCMI

This course was designed to develop in the student geometrical principles with application to concentration courses in Technology in Mechanical Engineering. The purpose is to shows students the applications of different mathematical concepts applied in instruments, tools, and equipment according to the topics discussed. In addition, the student will become familiarized with them thus preparing them for the concentration courses.

### CGSEG1 - Industrial Safety – 3 Credits Lecture 60 hrs

Until recently industrial society focused on machines, time and motion, in the pursuit of greater profit. Today the objective of safety is to achieve well-being through the efforts of all that are involved, since human beings continue to be the center of industrial processes. If human beings are affected, the impact on production is greater than if a machine is out of order. Safety is the keystone to our lives and must be present in all of our activities. Although this course focuses more on industrial safety, students will obtain the basic knowledge all workers need to prevent accidents and maintain a safe environment in the workplace.

### AGFIT3 - Technical Physics – 3 Credits Lecture 60 hrss Pre-requisites –AGMAG

This course presents the basic concepts and the principles of physics which will be the basis for the further study of Science and Technology. These concepts are developed clearly and logically along with their application in daily life.

### **AGCHU5 - Interpersonal Relations – 3 Credits Leture 60 hrs**

The course explores the dimensions of human behavior and interpersonal relationships in the decision-making process. Leadership dynamics and group behavior are analyzed in discussions of case studies. Labor and administrative relations in the production process are examined.

### AGHUI6 - Humanities I – 3 Credits Leture 60 hrs

This course studies the development of the occidental civilization from its first inhabitants to the Classic Roman civilization and Islamic expansions. It also emphasizes the development of occidental culture which will develop an appreciation of origins and importance of this culture in students. The student will develop a creative project that reflects the sensibility and appreciation in any area of Humanities.

AGHUII7 - Humanities II – 3 Credits Lecture 60 hrs Pre-requisites –AGHU16

This course traces the development of the occidental medieval civilization up to our present time. It studies the development of occidental culture and will create on students an appreciation of the origins and importance of their culture. It is expected that the student develops creative work that reflects his/her sensibility and appreciation in any area of the Humanities.

### CGAGN7 - Business Ethics and Administration – 3 Credits Leture 60 hrs

The course presents students with the situations that are inherent to the administration and management of a business, and the role of business in the economy. A detailed discussion is provided of management processes and the four functions of management: planning, control, behavioral processes, and decision-making, emphasizing supervisory processes. Basic budgeting and accounting principles, time management and inventory are studied. Emphasis will be made on business development and establishing a business.

### CGCOM2 – Computer Principles – 3 Credits Leture 60 hrs

In this course, the introduction to computers will be focused in different topics which go from the history of computers evolution, its parts, and the Internet. In addition, it will teach students to work with different Microsoft Office® programs which will provide them the capacity to use documents, tables, graphics, presentations, letters; among others.

### TGFEL6 - Electronics Fundamentals and Laboratory – 3 Credits Leture 60 hrs Pre-requisites –AGMAG, TGFUE

In the past, electricity and electronics were seen as two separate fields; today, modern technology has brought them closer. A modern day electrician is not fully trained without the knowledge of basic electronics and cannot compete for a position in modern industry. Job offerings specify that is needed is an electrician with a knowledge of electronics. This course and continuation courses provides the basic knowledge students will need to compete in modern industry, especially in the pharmaceutical industry.

### TGFUE5 – Fundamentals of Electricity – 3 credits Lecture 60 hrs

This course includes three units: Knowing Electricity, Analysis of DC Electrical Circuits, and Medical Instruments. In the first unit, Knowing Electricity, important historical data is offered the basic principles of electrical theory are discussed as well as methods of producing electrical energy. It also includes the effects of electricity and its fundamental elements.

In the second unit, Analysis of DC Electrical Circuits, Ohm's Law, the term "circuit" as well as information related to the components of a circuit, continuity, serie/parallel and combined; Watt's Law. In the third unit, Measuring Instruments, incluyes the fundamental aspects related to the identification and function of measuring instruments as well as the study of the measures unit, connection and reading of instruments.

### **CGRIT7D - Writing of Technical Reports – 3 Credits Leture 60 hrs**

This course explores the application, preparation, and understanding of the different reports that are used as communication, information, and record-keeping tools for simple or complex equipment or systems in modern industry.

### CGSOB6 – Welding and Laboratory – 3 Credits Leture 20 hrs/ Laboratory 40 hrs

During the learning process students will have an opportunity to acquire knowledge and work with electric arc, oxyacetylene, and specialized welding equipment. Students will also identify and use the tools and equipment needed to carry out this process. In addition, students will learn and apply safety rules that are very necessary and important for all welders.

### TPRIN8 – Practice in the Industry - 6 Credits Practice hours – 120

Practice in the industry is an educational process that provides teachers and students with the opportunity of evaluating whether the student has the necessary knowledge and skills to work in the professional and technical field which he or she is studying. This learning process allows students to effectively integrate theory and practice, not only in technical areas but also in terms of academic subjects. In this course, human relations, communication, and the student's commitment in the learning process will also be evaluated.

### 6.4.2 TECHNICAL PROGRAMS

### **GENERAL COURSES**

### AMATE4 – Applied Mathematics – 2 Credits Lecture 40 hrs

The course focuses on developing students' ability to think, solve problems and communicate ideas. A variety of activities or problems will be provided during the course for the student to carry out or solve as a team. The teacher will encourage student participation as a team, general discussions, using calculators, as well as innovative ideas that may be produced in these activities. The course provides the basis for working with trigonometry and geometry. By their nature, trigonometry and analytic geometry are applicable to many areas of knowledge. Students will find the basic tools and theory tools needed to successfully solve most of the problems they will face in a technical career.

### AMEFO1 – Measurements and Formulas – 2 Credits Lecture 40 hrs

This course prepares the student to develop problem-solving skills; trust in their own mathematical thinking; learn to communicate mathematically; learn mathematical reasoning; perform connections between different types of mathematics and other disciplines; learn the value of mathematics in our society and its relation with people; and use technology and decide when its use is adequate. Students will work in teams and establish general discussions; will use calculators and create innovative ideas. The course provides the basis for working with trigonometry and geometry. By their nature, trigonometry and analytic geometry are applicable to many areas of knowledge. Students will find the basic tools and theory tools needed to successfully solve most of the problems they will face in a technical career.

### AINGL1 – Technical English – 2 Credits Lecture 40 hrs

This course has been designed to provide students with a basic knowledge of the English language using technical terms and vocabulary. The course provides students with the opportunity of learning the basic parts of speech and technical vocabulary, with which to form full sentences and learn to communicate in their field of study.

### CICOM2 – Introduction to Computers – 3 Credits Lecture 60 hrs

This course provides students with a basic knowledge of computers and their components. Students will be able to perform simple tasks using different computer software.

### CCOST5 – Costs and Estimates – 1 Credit Lecture 20 hrs

This course is designed to prepare and develop students with regard to two technical aspects, and their application and maintenance, and secondly with regard to human relationships between service providers and their clients. Also, the student will be able to establish the difference between the manufacturer's warranty and the service provider's guarantee of equipment as well as the benefits clients may obtain from an appropriate maintenance contract and the benefits for the organization.

### AREHU5 –Human Relations – 1 Credit Lecture 20 hrs

This course explores the dimensions of human behavior and interpersonal relations in the decision-making process. Leadership dynamics and group behavior are analyzed in discussions of case studies. Labor and administrative relations in the production process are examined.

### CSEGU4 –Industrial Safety– 1 Credit Lecture 20 hrs

This course provides the basic knowledge that will enable students to describe industrial safety systems, to analyze occupational accidents according to their cause, and how they may be prevented.

#### CSEGI1 – Industrial Safety – 2 Credits Conference 40 hrs

This course provides students with basic knowledge to describe security systems in the welding industry, analyze on-the-job accidents according to their causes, and how to avoid them. In addition, it includes vital information regarding the chemical composition of safety bottles, tools, and other security aspects of the job.

## TLEXO\_ – Occupational Experience Laboratory – (the number of credits and last character of the code for this course may vary depending on the program of study) Practice hours 120

The purpose of this course is that students perform their practice phase either in the school (internship) or outside (externship). The internship provides a valuable real-world opportunity for students to have hands-on, practical experience in preparation for their future performance in the field. In addition, they will put in practice the abilities and knowledge related and acquired through their training and have the opportunity to reinforce skills. During the external practice, the student will relate to a real-life working environment where he/she can observe the development of different customer projects while still being part of the training being completed as part of his/her program of study.

### CSOLDL2 – Welding and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

The purpose of the Industrial Welding course is to provide young men and women with the knowledge and skills needed to perform welding. During the teaching and learning process students will have the opportunity to become acquainted with and handle electric arc, oxyacetylene, and specialized welding equipment. Student will also identify and use other tools and equipment needed for this process as well as becoming acquainted with and applying safety rules.

### TFDEL3 – Fundamentals of Electronics – 2 Credits Lecture 40 hrs

This course includes a discussion of semiconductors such as diodes, transistors, and operational amplifiers; among others.

### TFUEL3 – Fundamentals of Electricity – 3 Credits Lecture 60 hrs

This course provides students with a basic knowledge of electricity. Includes atomic theory, analysis of direct and alternate current circuits, using fundamental concepts of mathematics and physics. Laws that regulate the electrician's profession are also discussed.

#### ADVANCED AUTOMOTIVE TECHNOLOGY

#### TELEL1 – Electricity and Electronics Fundamentals – 3 credits Lecture 60 hrs

This course is an introduction to electricity and electronics principles in addition to the laws that apply as well as the construction and function of electrical and electronic components.

### TIMAU1 – Introduction to Automotive Mechanics – 3 credits Lecture 60 hrs

This course is an introduction to the basic fundamentals of automotive technology. It includes information regarding the construction, operation, tools, certifications, service information and vehicle maintenance.

### TMCIA1 – Internal Combustion Engine of the Automobile and Laboratory – 3 credits

Lecture 20 hrs/Laboratory 40 hrs

This course details the construction and operation of modern vehicles. The student will learn the names and location of the parts of an engine and its variations in design.

### TINY12 – Injection System of the Automobile I and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course provides the necessary information to repair emission control systems. The most common performance problems will be described; its causes will be explained as well as how to correct them. The course also explains how to use advanced diagnosis tools to find problems in related systems.

### TREMO2 – Engine Repair and Laboratory – 3 credits Pre-requisites – TMCIA1 Lecture 20 hrs/Laboratory 40 hrs

This course prepares the student with the necessary skills to diagnose and repair engines through the description of repair problems and procedures. It will also provide vast knowledge regarding internal and external functions of an engine and everything related to its repair.

### TTDAL2 – Front End Steering and Wheel Alignment and Laboratory – 3 credits

Lecture 20 hrs/Laboratory 40 hrs

This course provides the student with the knowledge and skills required for the operation, construction, service and repair of suspension and direction systems.

### TSINY23 – Injection System of the Automobile II and Laboratory – 3 credits Pre-requisites – TSINY12

Lecture 20 hrs/Laboratory 40 hrs

This course introduces the operational principles of different fuel injection systems. Although variation in systems exists, its components are basically the same. This includes sensors, actuators and modules.

### TSEEA13 – Electrical and Electronic System of the Automobile I and

Laboratory – 3 credits Pre-requisites – TELEL1

Lecture 20 hrs/Laboratory 40 hrs

This course studies the function, behavior and application of electricity in the automobile. Electrical and electronic diagnosis tests will be performed in the vehicle and the battery, starter system and alternators terminology will be discussed.

### TFABS3 – Brakes System and ABS (TCS) of the Automobile and Laboratory – 3 credits

Lecture 20 hrs/Laboratory 40 hrs

This course details the operation, construction, service and repair of brakes systems from conventional to modern antilock.

### TATEC4 – Technological Advances in Automotive Mechanics – 3 credits

(Industry – Training Centers)| Pre-requisites – TIMAU1

Fre-requisites – ThylAC

Lecture 20 hrs/Laboratory 40 hrs

This course presents the student the latest technological advances in the automotive industry which will be presented by the training centers and their instructors and will expose the students to such advances.

### TSACAL4 – Air Conditioning System of the Automobile and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course explains the operation, service and repair of air conditioning systems in a vehicle including laboratories to develop diagnosis and repair skills. The repair methods to be used are explained in detail without harming the environment.

### TSEEA24 – Electrical and Electronic System of the Automobile II and Laboratory – 4 credits

**Pre-requisites – TSEEA13** 

Lecture 20 hrs/Laboratory 60 hrs

This course studies the function, behavior and application of electricity in the automobile. Electrical and electronic tests will be performed in the vehicle and also the following topics will be discussed: ignition system, lighting system, instruments, speakers and wipers.

### TSTFAL5 – Power Transmission System of the Automobile and Laboratory – 4 credits

Lecture 20 hrs/Laboratory 60 hrs

One of the most important systems in a vehicle is the powertrain which is composed of the transmission, transfer case and differential. This system performs through a series of gears configurations and through computerized hydraulic and electronic components. In this course, the students will discuss all of these systems and their functions and will learn to diagnose and repair them and its components.

#### DIESEL TECHNOLOGY AND ADVANCED SYSTEMS

#### TIMDI1 – Introduction to Diesel Mechanics – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

This course provides students with knowledge and awareness of the different agencies, laws, regulations, and safety standards in the field of diesel mechanics. A thorough knowledge of automobiles, the function of the agencies, and the purpose of the laws, regulations, and the safety standards will be acquired.

### TCID11 –Internal Diesel Combustion Engines I and Laboratory – 6 Credits Lecture 40 hrs/Laboratory 80 hrs

This course prepares students to repair American, European, and Japanese automotive engines. The course requires a mastery of basic knowledge and skills to repair the various components of the engine. Eventually students will be able to specialize in repairing internal combustion engines.

### TCID22 – Internal Diesel Combustion Engines II and Laboratory – 5 Credits Pre-requisites – TCIDII Lecture 35 hrs/Laboratory 65 hrs

This course provides broad knowledge on the internal and external aspects of diesel engine operation and repairs. The course also will discuss different diagnostic technologies used in internal combustion diesel engine repairs.

# TELDI2 – Diesel Cooling and Lubrication Systems and Laboratory – 3 Credits Pre-requisites –TCIDII Lecture 20 hrs/Laboratory 40 hrs

This course prepares students to repair and diagnose the different kinds of lubrication and cooling systems in diesel equipment. Mastery of basic knowledge and skills related to these systems is required. Eventually students will be able to specialize in repairing these systems.

### TSEDI3 –Diesel Electrical and Electronic Systems and Laboratory – 3 Credits Pre-requisites –TFDEL2 Lecture 20 hrs/Laboratory 40 hrs

This course enables students to repair the various kinds of systems in American, European, and Japanese automobiles. Students must master basic knowledge and skills related to the different electronic systems in vehicles. Students may eventually be able to specialize in automotive electronics.

### TSACD3 – Diesel Air Conditioning System and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

In this course students will learn to work with diesel automotive air conditioning systems: disassembling and assembling reciprocal compressors, rotary compressors, and clutches; replacing control mechanisms, the heating system, electric air conditioning circuits, soldering air conditioning components with aluminum and silver, using pressure gauges with R-12 and R-134a and air leakage detectors; among others.

### TTFDI5 – Diesel Power Transmission and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

This course prepares students to repair power transmission systems in American, European, and Japanese automobiles. Requires a mastery of basic knowledge and skills for repairing components of the transmission system. Eventually students may be able to specialize in the field of transmissions.

### TSRFD3 – Diesel Brake Systems and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

This course prepares students to repair American, European, and Japanese automobile brake systems. Requires a mastery of basic knowledge and skills for repairing components of conventional and ABS brake systems of vehicles. Eventually students may be able to specialize in automobile brake systems.

### TSHIN4 – Diesel Hydraulic and Pneumatic Systems and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

This course has been designed to provide students with theoretical knowledge and laboratory work with hydraulics and pneumatics applied to real-life situations. The combination of theory and laboratory practice will prepare students to perform different tasks with precision and safety.

#### TSIEDL4 – Diesel Injection System and Laboratory – 6 Credits Pre-requisites –TCID22 Lecture 40 hrs/Laboratory 80 hrs

This course prepares students to repair different injection systems such as Bosch, GM, Cummins, Robert Bosch, Caterpillar, and others. Requires a mastery of basic knowledge and skills for repairing components of the systems. Eventually students may be able to specialize in injection systems.

### TECHNOLOGY IN INDUSTRIAL ELECTRICITY WITH PLC AND RENEWABLE ENERGY and TECHNOLOGY IN INDUSTRIAL ELECTRICITY (MTI)

### TFEER1 – Fundamentals of Electricity and Renewable Energy – 3 Credits Lecture 60 hrs

This course provides students with a basic knowledge of electricity. Includes atomic theory, analysis of direct and alternate current circuits, using fundamental concepts of

mathematics and physics. Laws that regulate the electrician's profession are also discussed.

### TLIPD1 – Reading and Interpreting of Electrical Blueprints – 4 Credits Lecture 20 hrs/Laboratory 60 hrs

This course provides students with basic knowledge for reading and interpreting residential and industrial electrical drawings and those students may determine the load according to the specifications of the drawing or schematics.

### TSIES2 – Underground Electrical Installations Service – 3 Credits Pre-requisites –TFEER Lecture 20 hrs/Laboratory 40 hrs

This course describes the construction standards of the Puerto Rico Electric Power Authority for buried lines. Specifications, schematics, and drawings for distribution system design are also included.

MTI - This course describes the construction rules for the underground distribution of the local Electrical Power Authority. It also includes specifications, diagrams, and drawings of the distribution system designs.

#### TIELR2 – Residential Electrical Conduit Installations and Laboratory – 5 Credits Pre-requisites –TFEER Lecture 40 hrs/Laboratory 60 hrs

This course prepares students to carry out embedded and exposed electrical residential installations, to diagnose electrical failures and repair them according to the National Electrical Code and Puerto Rico Electric Power Authority Regulations.

MTI - This course prepares the student to perform exposed and embedded domestic installations, diagnose electrical failures and repair them according to the National Electricity Code Power Authority Regulations.

# TPCIL3 – Electrical Panels, Branch Circuits, Transfer Switches and Laboratory – 5 Credits Pre-requisites –TFEER Lecture 40 hrs/Laboratory 60 hrs

This course provides basic knowledge for installation and repair of meter bases, electric panels, and household and industrial electrical panels. Students also have the opportunity to connect branch circuits from distribution panels.

# TTLAE3 – Transformers, Aerial Lines and Laboratory – 3 Credits Pre-requisites –TFEER Lecture 20 hrs/Laboratory 40 hrs

Transformers are the most important devices in electricity. Thanks to transformers we can enjoy the benefits of electrical power in our homes and in industry. It is of vital importance that electricians have knowledge of the operation, combinations, and trajectory of distribution lines in power delivery. This knowledge is very important for

students who want to serve society as linemen at the Puerto Rico Electric Power Authority (PREPA.) or work at commercial power companies.

MTI - The transformer is the most important device in the electricity field. This course teaches the students how it works, combinations and path that distribution lines follow until delivering electrical energy.

### TCCELL4 – Electrical Circuits and Controls and Laboratory – 3 Credits Pre-requisites –TFEER

Lecture 20 hrs/Laboratory 40 hrs

This course provides students with basic knowledge on installing industrial machines using magnetic controls with various combinations of two and three buttons.

### TRMME4 – Repair and Maintenance of Electric Motors and Laboratory – 3 Credits

**Pre-requisites –TFEER** 

Lecture 20 hrs/Laboratory 40 hrs

The course provides basic knowledge of maintenance and repair of single and three phase DC and AC electrical motors.

# TILEL4 – Electrical Illumination and Laboratory – 4 Credits Pre-requisites –TFEER Lecture 40 hrs/Laboratory 40 hrs

This course recognizes the importance of luminaries in the field of electricity and discusses the elements and components of modern luminaries. Covers measurement for proper operation of the system.

### TRCEN4 –National Electrical Code and Regulations – 2 Credits Lecture 40 hrs

This course is designed to acquaint students with the laws that regulate the profession so that they can install electric wiring following the standards in the Puerto Rico Electric Power Authority Regulations. And the National Electrical Code, as the Licensed Electrician assumes full responsibility of wiring installed or certified.

MTI - This course studies the National Electrical Code, the laws that regulate the profession, and other applicable laws in the industry.

### TCPLC5 –Programmable Logic Controllers (PLC) and Laboratory – 4 Credits Lecture 20 hrs/Laboratory 60 hrs

This course includes an introduction to the theory of PLCs and discusses its components. There is also practice with programming and hardware.

TGPOT – Power Generators – 2 Credits Pre-requisites –TFEER Lecture 20 hrs/Laboratory 20 hrs This course provides basic knowledge on preventive maintenance and safe and correct installation of emergency generators according to Public Law 83, which regulates the installation of electrical power plants in Puerto Rico.

MTI - This course provides basic knowledge regarding preventive maintenance and installation of an emergency generator in a safe and correct manner according to the regulations of power generators installation.

# TSDCD – Direct Current Systems – 3 Credits (only for PLC and Renewable Energy) Pre-requisites –TFEER Lecture 20 hrs/Laboratory 40 hrs

This course prepares the student for modern systems as well as wiring and diagnosis in networks for communication and for safety and lighting. The student will learn about DC energy sources as well as sensors, actuators, and controllers.

# TEREND – Renewable Energy – 4 Credits (only for PLC and Renewable Energy) Pre-requisites –TFEER Lecture 30 hrs/Laboratory 50 hrs

This course has been designed for the student to comprehend the importance of the use of renewable energy as an alternative to the use of fossil fuels. The student will be provided with the necessary information to identify the best source of renewable energy according to the need and availability of the recourse in that area. The student will also be provided with the necessary skills to install and/or repair these sources of alternate power.

#### TECHNOLOGY IN REFRIGERATION AND AIR CONDITIONING

### TFDAC1 – Fundamentals of Refrigeration and Air Conditioning – 3 Credits Lecture 60 hrs

This course has been designed to have students develop knowledge of refrigeration systems in general. As an introductory course it is the basis for other courses in the program. In addition, the course will acquaint students with the terminology, laws and regulations related to the regulation of the profession.

# TFMRA2 – Mechanical Fundamentals of Refrigeration and Air Conditioning – 3 credits Pre-requisites –TFDAC1 Lecture 20 hrs/Laboratory 40 hrs

This course is designed to provide necessary training to develop students' knowledge of the operation and maintenance of the different kinds and classes of compressors and their use in industry. Students will become acquainted with different instruments and processes of recovery, reuse and recycling of the different kinds of refrigerants.

### TRACDL 2 – Residential Refrigeration and Air Conditioning and Laboratory – 4 Credits

Lecture 30 hrs/Laboratory 50 hrs

This course is designed to have students acquire knowledge and skills of the operation, installation, and repair of household refrigerators and air conditioners. The course will provide additional necessary knowledge of electrical circuits and assembly equipment. Reading of electrical drawings for the equipment will also be covered.

### TISRA5 – Introduction to Complex Refrigeration and Air Conditioning Systems – 2 Credits

Lecture 40 hrs

Industrial refrigeration mechanics install, provide maintenance, and repair industrial and commercial refrigeration systems, assemble and disassemble parts using industrial and commercial tools, assemble and disassemble parts using hand tools, cut and join pipes/lines, and isolate cabinets. To work effectively, the industrial mechanic must have knowledge of the basic principles of electrical circuits and the specific procedures and techniques of this occupation. In addition, the industrial mechanic prepares, modifies, and interprets drawings, and assembles refrigeration systems according to specifications.

### TRACCL3 – Commercial Refrigeration and Air Conditioning and Laboratory – 4 Credits

**Pre-requisites –TRACDL2** 

Lecture 30 hrs/Laboratory 50 hrs

This course is designed to have students acquire knowledge and skills related to the operation, installation and repair of commercial refrigerators and air conditioners. The course will provide additional necessary knowledge of electrical circuits and assembly equipment. Reading of electrical drawings and graphic material for installing refrigerators will also be covered.

### TACIN4 – Industrial Refrigeration and Air Conditioning and Laboratory – 5 credits

Pre-requisites –TRACDL2, TRACCL3

Lecture 40 hrs/Laboratory 60 hrs

By completing this course, students will have the necessary knowledge and skills to distinguish between a commercial unit and a major refrigeration system. Students will have knowledge of the different methods of industrial maintenance of complex systems, as well as the controls and accessories for mechanical operation. In addition, students will be able to evaluate heat loads in major systems.

### TCCEL3 – Electrical Circuits and Controls and Laboratory – 5 Credits Lecture 40 hrs/Laboratory 60 hrs

This course is designed to have students acquire knowledge and skills in the installation and troubleshooting of problems with the electrical controls used in refrigeration systems. Students will also be able to calculate the time, size, and capacity of control devices used to effectively energize refrigeration units.

### TCPLC4 –Programmable Logic Controllers (PLC) and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

This course includes an introduction to the theory of PLCs and discusses its components. There is also practice with programming and hardware.

### TSACOL5 –Air Conditioning System of the Automobile and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

In this course students will learn to work with automotive air conditioning systems: disassembling and assembling reciprocal compressors, rotary compressors, and clutches; replacing control mechanisms, the heating system, electric air conditioning circuits, soldering air conditioning components with aluminum and silver, using pressure gauges with R-12 and R-134a and air leakage detectors; among others.

#### TECHNOLOGY IN INDUSTRIAL WELDING

#### TISOL1 – Introduction to Welding – 2 Credits Lecture 40 hrs

The purpose of this course is to provide youth and adults of both genders with the knowledge and skills needed for welding.

### TSPPL1 – Flat Position Welding and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

This course provides students with the opportunity to become acquainted with and handle arc welding equipment. In addition, the course identifies and uses tools and equipment needed in this process. Students will also acquire knowledge of and apply safety rules. During the process, students will become acquainted with the kinds of joints and electrode movement in welding.

### TPUSL1 – Preparation of Welding Joints and Laboratory – 2 Credits Pre-requisites –TSPPL1 Lecture 20 hrs/Laboratory 20 hrs

This course provides student with the opportunity of acquiring knowledge and safely applying different practices in the laboratory. In addition, students will learn discipline and technique to weld the different joints that they will find in the employment market.

### TDIPS2 – Drawing & Interpretation of Welding Blueprints and Symbols – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

This course is an introduction to the basic principles of the technology of drawings and interpretation of welding drawings and symbols. The course includes the purposes, differences, and other aspects. In addition, students will identify basic components.

### TSPHL2 – Horizontal Position Welding and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs Pre-requisite TSPPL1

This course provides students with an introduction to the fundamentals and procedures at an intermediate level of welding. In the process, students will acquire the knowledge needed to execute good quality welding and compete in the job market.

#### TSPVL2 – Vertical Position Welding and Laboratory – 4 Credits Pre-requisites –TSPPL1 Lecture 30 hrs/Laboratory 50 hrs

This course provides students with an introduction to the fundamentals and procedures at an intermediate level of welding. During the process, students will acquire the knowledge needed to execute high quality welding and compete in the employment market.

#### TSSCL3 – Over the Head Welding and Laboratory – 4 Credits Pre-requisites –TSPPL1, TSPHL2, TSPVL2 Lecture 30 hrs/Laboratory 50 hrs

This course provides students with an introduction to the fundamentals and procedures at an advanced level of welding where previously learned skills and procedures will be applied. In addition, students will be able to combine techniques they have learned to weld joints in an overhead position.

#### TSESL3 – Specialized Welding and Laboratory – 5 Credits Pre-requisites –TSPPL1, TSPHL2, TSPVL2 Lecture 35 hrs/Laboratory 65 hrs

This course introduces students to the fundamentals and procedures of advanced welding. During the course, high quality welding will be performed using different techniques and materials.

# TPCMB3 – Cutting Processes, Metal Base Preparation, and Laboratory – 2 Credits Pre-requisites – TSPPL1, TSPHL2, TSPVL2 Lecture 20 hrs/Laboratory 20 hrs

This course provides the student an instroduction to the fundamentals, processes, and function with oxi-fuel. It also includes information of the chemical composition of safety bottles, tools, and job position.

### TSTIL4 – Industrial Pipe Welding and Laboratory – 6 Credits Pre-requisites –TSPSCL3, TSEL3, TPCMB3 Lecture 40 hrs/Laboratory 80 hrs

This course introduces students to the fundamentals and procedures of industrial pipe welding. Students will have the opportunity to become acquainted with appropriate techniques for cutting, beveling, spot welding, and welding different kinds of pipes, practicing all positions and joints that are studied during the course.

#### TECHNOLOGY IN MARINE MECHANICS WITH ELECTRONIC SYSTEMS

#### TIMMA1 – Introduction to Marine Mechanics – 3 Credits Lecture 60 hrs

This course is focused on presenting students to the environment and subject matter of marine mechanics. The course presents fundamentals and regulations of the industry, laying the groundwork for more specific study within the field of specialization.

#### TIMAR1 – Marine Introduction – 3 Credits Lecture 60 hrs

This course presents students with an overview of the maritime environment, not only with regard to technical and mechanical aspects but with regard to safety at the dock and at sea.

### TMCIT1 – Internal Combustion Engine and Laboratory (Jet ski and Outboard) – 4 Credits

#### Lecture 30 hrs/Laboratory 50 hrs

This course includes an overview of the principles of combustion, which are applicable to two and four cycle engines. The course describe gasoline as well as diesel engines

### TSIAC2 -Air Conditioning System (Marine Mechanics) – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

This course is designed to familiarize students with marine refrigeration. The course includes basic and general principles to include specialized systems that are applicable to the marine environment.

# TSICO3 – Computerized Injection System and Laboratory (Inboard and outboard motors, Marine Engines / Jet ski) – 5 Credits Lecture 35 hrs/Laboratory 65 hrs

This course includes the fundamentals of different fuel injection systems in marine technology; includes diagnosis for maintenance and repair of these systems.

### TSCOL3 – Fuel System and Laboratory (Jet ski and Outboard) – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

This course includes the different kinds of fuel that are used in the industry; includes the supply and measurement systems for different kinds of engines, as well as describing diagnostic, preventive, and repair procedures.

#### TSIEL4 – Basic Electrical System (Marine Mechanics) – 1 Credit Pre-requisites –TFDEL2

#### Lecture 20 hrs

This course includes the operation and construction of accumulators (batteries), ignition engines, alternators, and generators. The course also covers diagnostics and service for these components.

### TSCEMG4 – Gas Emission and Control System and Laboratory (Jet Ski and Outboard) – 3 Credits

**Pre-requisites –TSICO3** 

Lecture 20 hrs/Laboratory 40 hrs

This course provides information on contamination and emission control systems. Contaminants and applicable regulations and laws are describe.

### $TSEAA4-Electrical\ and\ Electronic\ System\ (Jet\ ski\ and\ Outboard)-5\ Credits\\ Pre-requisites-TFDEL2$

Lecture 35 hrs/Laboratory 65 hrs

This course includes the fundamentals of electricity; identifies the kinds of circuits that are used in repairs and maintenance; it also includes the different applications within the maritime industry.

### TCALA4 – Trailers and Laboratory – 3 Credits Lecture 20 hrs/Laboratory 40 hrs

The course covers regulations and laws applicable to trailers as well as types of trailers, dimensions, components, and electrical systems.

#### TSTFUL5 – Power Transmission System and Laboratory (Jet Ski and Outboard)-6 Credits

Lecture 40 hrs/Laboratory 80 hrs

This course includes the principles and fundamentals of transmission systems as well as identifying systems that are applicable to marine technology. The course presents different kinds of power transmissions and their components and applications.

#### TECHNOLOGY IN COLLISION AND AUTO BODY REPAIR

### TMECA1 – Automotive Mechanics Applied to Collision and Auto Body Repair – 6 credits

Lecture – 40 / Laboratory – 80

This course will enable students to learn about different topics related to automotive mechanics combining them with topics that apply to collision and auto body repair.

### TFBAH1 – Basic Fundamentals of Collision and Auto Body Repair – 5 credits Lecture – 35 / Laboratory – 65

This course provides students with the necessary knowledge about the collision and auto body repair, environmental regulations, and the construction of the modern compact.

#### TSOES2 – Specialized Welding and Laboratory – 3 credits Lecture – 20 / Laboratory – 40

Upon completing this course, students will have learned the welding type to be used when repairing collided car bodies. Students will also learn how to weld car bodies, structures, and other parts of collided vehicles.

#### TEEST2 – Structural Straightening and Laboratory – 6 credits Lecture – 40 / Laboratory – 80

Upon completing this course, students will be able to evaluate, quote, and repair damages to the structure of an automobile. Students will also be able to identify damaged safety points of a collided car.

#### TCOLO3 – Colorimetry and Laboratory – 3 credits Lecture – 20 / Laboratory – 40

Upon completing this course, students will be able to prepare and create different types of colors by combining different inks. Moreover, students will be able to perform the correct procedures when applying the different types of finishing coats.

### TPREPS3 – Preparation of Surfaces and Laboratory – 6 credits Lecture – 40 / Laboratory – 80 Pre-requisite – TFBAH1

Upon completing this course, students will be equipped with the knowledge and skills necessary for the preparation of surfaces. Students will learn specific application methods for both high quality materials and paints. Moreover, they will learn concealing techniques for sensitive surfaces as well as finishing procedures and techniques.

### TAPAC4 – Finishing Application and Laboratory – 5 credits Lecture – 35 / Laboratory – 65 Pre-requisite – TPREPS3

Throughout this course, students will learn and develop application techniques of different chemical materials, their correct handling, and automotive finishing techniques using cutting-edge materials that are appropriate for each type of finishing.

### TPRPL4 – Plastics Preparation and Repair and Laboratory – 4 credits Pre-requisite – TPREPS3 Lecture – 30 / Laboratory – 50

This course will teach students about the knowledge used for identifying the different types of plastics, the restoration of plastic parts, and the repainting of an automobile's interior and exterior plastic parts.

### TPSEE5 – Principles of Electrical and Electronic System – 2 credits Lecture – 40 Pre-requisite – TMECA1

Throughout this course, students will have an opportunity to acquire theoretical and practical knowledge about electrical and electronic systems, their components, and diagnostics tools. Students will also learn how to create electrical circuits with relay monitors as well as other components.

### TSDRL5 – Repair of Small Damages, Detailing, and Laboratory – 2 credits Lecture – 40

Pre-requisite - TPREPS3, TAPAC4

This course deals with the development of basic repair skills for small imperfections, polishing, interior maintenance, and detailing. It will also provide students with the basic skills for small dent repairs without repainting, using cutting-edge repair techniques.

### $CABTH5-Basic\ Administration\ of\ the\ Collision\ and\ Auto\ Body\ Repair\ Shop\ -2$ credits

Lecture - 40

**Pre-requisite – CCOST4** 

This course offers training in the administration of a repair shop in order to efficiently develop and administer the business while keeping in mind the different costs, both fixed and variable, as well as the development of a production shop.

#### **AUTOMOTIVE MECHANICS (36 credits)**

#### TIMAU1 - Introduction to Automotive Mechanics - 3 Credits

This course provides an introduction to the fundamentals of automotive technology; it includes information on the manufacture and operation of automobiles. Certifications, safety, tools, information on service and maintenance are provided; which will be groundwork for future courses and practice.

### TMCI11 – Internal Combustion Engine of the Automobile and Laboratory – 5 Credits

This course covers the manufacture and operation of engines in late model automobiles. Cycles of four stroke engines are covered and names and locations of main components are presented. The course also includes engine metrics and performance.

#### TSCAU1 – Fuel System of the Automobile and Laboratory – 3 Credits

This course has been designed to cover all aspects of fuel management in modern automobiles; includes servicing and operation current injection systems. Parts and procedures are described. In addition, students will gain an understanding of injection systems and their features in laboratory sessions in which they may become familiar with diagnosis and repair procedures.

### TCEGL2 – Gas Emission and Control System of the Automobile and Laboratory – 3 Credits

This course provides information that is necessary for repairing emission control systems. Basic terminology regarding automotive contaminants is included as well as the fundamentals and operation of the different systems.

### TSEEA2 – Electrical and Electronic System of the Automobile and Laboratory – 6 Credits

This course describes the operation, diagnosis and repairs of the principal electric and electronic systems in automobiles; includes systems such as ignition electronics, computerized systems, and their respective laboratories.

### TSFTA3 – Brakes and Suspension System of the Automobile and Laboratory – 6 Credits

This course explains the function, components, service, and repairs to the automobile's suspension. It also discusses the function, components, operation, inspection, and service to the brakes system.

#### TREMO2 – Engine Repair – 3 credits

This course provides the student with the necessary skills to diagnose and repair engines through the description of problems and repair procedures. It also provides ample knowledge of the internal and external function of an engine and everything related to its repair.

#### TECHNOLOGY IN ADVANCED AUTOMATIC TRANSMISSIONS (48 credits)

#### TIMAU1 – Introduction to Automotive Mechanics – 3 Credits Lecture 60 hrs

This course provides an introduction to the fundamentals of automotive technology. It includes information on the manufacture and operation of automobiles. Certifications, safety, tools, information on service and maintenance are provided; which will be groundwork for future courses and practice.

### TMCI11 – Internal Combustion Engine and Laboratory – 4 Credits Lecture 30 hrs/Laboratory 50 hrs

This course covers the manufacture and operation of engines in late model automobiles. Cycles of four stroke engines are covered and names and locations of main components are presented. The course also includes engine metrics and performance.

### TITAU1 – Introduction to Automatic Transmissions – 4 Credits Lecture 80 hrs

This course is an introduction to the fundamentals of automatic transmission technology. Includes purposes, differences, and uses. In addition, basic components are identified.

### TSEEA2 – Electrical and Electronic Systems of the Automobile and Laboratory – 6 Credits

#### Lecture 30 hrs/Laboratory 50 hrs

This course describes the operation, diagnosis and repair of the principal electric and electronic systems in automobiles. It includes systems such as ignition electronics, computerized systems, and their respective laboratories.

#### TCMTA2 – Mechanical Components in Automatic Transmissions – 1 Credit Pre-requisites –TITAU1 Lecture 10 hrs/Laboratory 10 hrs

This course has been designed to examine the mechanical components of power transmission systems.

### TSEJA3 – Automobile Fuel Injection System (European, Japanese, and American Automobiles) and Laboratory – 6 Credits

**Pre-requisites –TMCI11** 

Lecture 40 hrs/Laboratory 80 hrs

This course provides an introduction to the operating principles of the various fuel injection systems. Although there are variations among these systems, their components are basically similar, including sensors, actuators, and modules.

### TTATD3 – Automatic Transmissions (Front-End Drive of European, Japanese, and American Automobiles) and Laboratory – 4 Credits

**Pre-requisites –TITAU1** 

Lecture 30 hrs/Laboratory 50 hrs

This course has been designed to explain and describe the operation and diagnosis of front-wheel drive transmission components in domestic and imported automobiles.

#### TDIEJ3 – Differentials and Drive Axles – 2 Credits Lecture 20 hrs/Laboratory 20 hrs

This course has been designed to present the fundamentals of front-wheel and rear-wheel drive systems differentials and shafts.

### TTATT4 – Automatic Transmissions (Rear-End Drive of European, Japanese, and American Automobiles) and Laboratory – 6 Credits

**Pre-requisites –TITAU1** 

Lecture 40 hrs/Laboratory 80 hrs

This course has been designed to explain and describe the operation and diagnosis of rear-wheel drive transmission components in domestic and imported automobiles.

# TSCEL4 –Electronic Controls and OBD II Systems (Second Generation Computerized Diagnosis) – 5 Credits Lecture 35 hrs/Laboratory 65 hrs

This course has been designed to train students in the use of modern computerized systems as applied to current automatic transmissions. The systems are useful for diagnosis and repairs.

#### MOTORCYCLES REPAIR AND MAINTENANCE

#### TIMMO1 – Introduction to Motorcycles Mechanics – 3 credits Lecture 60 hrs

This course provides the student general information regarding motorcycles repair and maintenance. The student may apply this knowledge for his personal use or professionally.

### TMCMP1 – 2 strokes and 4 strokes Internal Combustion Engine and Laboratory 5 credits

Lecture 35 hrs/Laboratory 65 hrs

This course includes everything related to combustion principles that apply to two cycle and four cycle engines.

### TSEEMO2 – Electrical and Electronic System and Laboratory - 4 credits Lecture 30 hrs/Laboratory 50 hrs

This course details the operation, diagnosis and repair of the principal electrical and electronic systems in a motorcycle. It also includes systems such as: electronic ignition, computerized system and their respective laboratories.

### TELMO2 – Lubrication and Cooling System and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course prepares the student in the repair and diagnosis of different types of lubricating and cooling systems for motorcycles. It requires knowledge and basic skills of different lubricating and cooling systems for motorcycles.

### TSIGN2 – Ignition Systems – 3 credits Lecture 20 hrs/Laboratory 40 hrs

Upon completion of this course, the student will identify different types of ignition and its components. They will also identify the operation of an ignition system in a motorcycle.

#### TSCCE3 – Fuel and Emission Control System and Laboratory – 6 credits Pre-requisites – TMCMP1 Lecture 40 hrs/Laboratory 80 hrs

This course covers everything related to fuel handling in motorcycles. It includes service, operation and functioning of different types of fuel systems. The course will provide information for the repair and diagnosis of different types of fuel systems including fundamentals related to combustion contaminants.

### TTMOT3 – Transmissions and Laboratory - 6 credits Pre-requisites – TIMMO1 Lecture 40 hrs/Laboratory 80 hrs

This course studies all aspects related to power transmissions used in motorcycles.

### TSFSD4 – Brakes, Suspension and Direction System and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course studies the operation, construction, service and repair of brakes systems from conventional systems to antilock systems. It includes front and rear suspension components.

#### TACCE4 – Accessories and Laboratory 5 credits Lecture 35 hrs/Laboratory 65 hrs

Upon completion of this course, the student will identify the types of motorcycles accessories available in the market. These accessories can be classified depending on the type of motorcycles to which they apply. The course includes sports, bikes, cruising bikes, all terrain bikes and small motorcycles.

#### **TECHNOLOGY IN RACING MECHANICS**

#### TEDMR1 – Fundamentals of Racing Mechanics – 4 credits Lecture 30 hrs/Laboratory 50 hrs

This course details the configurations required for the construction of a racing automobile regarding its powertrain, chassis, body, and safety. It also studies the requirements for the compliance of regulations and the certifications required by organizations and racing tracks selected for competing.

### TEMMR11 - Construction and Modification of Racing Engines I and Laboratory - 6 credits

#### Lecture 40 hrs/Laboratory 80 hrs

This course details the construction and modification of engines for competitions (piston or rotor) according to the required applications and specifications. It includes the measurement and configuration of engines to obtain maximum performance and tolerance.

# TSACL2 – Racing Fuel Feeding System and Laboratory – 6 credits (Gasoline, Methanol, Nitro and Turbo) Pre-requisites – TFDMR1

Lecture 40 hrs/Laboratory 80 hrs

This course studies everything related to the fuel feeding system, either carburated or programmable injection system. It includes the operation, function, service modifications required according to its application and the competition specifications allowed.

TEMMR22 – Construction and Modification of Racing Engines II and Laboratory – 3 credits
Pre-requisites – TEMMR11

Lecture 20 hrs/Laboratory 40 hrs

This course details the precise and exact measuring concept (blueprinting) and the adequate assembly process for racing engines (piston or Rotary) according to the desired and required specifications.

## TSEEAR3 – Electrical and Electronic System of the Racing Automobile and Laboratory (Racing Wiring) – 6 credits Lecture 40 hrs/Laboratory 80 hrs

This course details the concept of precise and exact measuring (Blueprinting) and the adequate assembly process for competition engines (piston or rotative) according to the desired application and the required specifications.

#### TFMSH3 – Machine Shop Fundamentals – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course has been designed for the study, comprehension of properties, tests and treatments of metallic elements. The student will understand the alloys and compounds manufactured that have facilitated productivity and have increased resistance to different machinery. The student will also understand that metals, especially ferrous, are used the most.

#### TMASH13 – Machine Shop Work I and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

In this course the student will learn the basic operations of the tool machine designed for prime matter of metallic or alloyed elements, to a normally flat finish.

### TSFL4-Brakes System in Racing Automobiles and Laboratory -3 credits Lecture 20 hrs/Laboratory 40 hrs

This course details the operation, modifications, replacement, construction, services and repairs of conventional brakes system up until full racing brakes systems.

#### TMASH24 – Machine Shop Work II and Laboratory – 3 credits Pre-requisites – TMASH13 Lecture 20 hrs/Laboratory 40 hrs

This course teaches the application of a mechanical lathe; the student will learn its use for high-precision tasks where cuts with any type of thread are required according to international standards. The student will also use mathematical and practical knowledge for calculations and cutting, all types of axles and of drilling operations.

### TCCSL4 – Chassis Construction, Suspension and Laboratory – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course provides the student with the skills and knowledge required for the construction and modification of chassis.

# TTFLR5 – Power Transmission and Laboratory (Differential, Axle, Pinion, Automatic and Manual) – 5 credits Lecture 35 hrs/Laboratory 65 hrs

One of the most important systems in a vehicle is the powertrain system which is composed of the transmission, transfer case and differential. This course studies all these systems and how they function.

#### <u>AUDIOVISUAL TECHNOLOGY AND SECURITY SYSTEMS</u>

### TFDA11 – Fundamentals of Electronics (A/C and D/C and Laboratory) – 4 credits Lecture 30 hrs/Laboratory 50 hrs

This course studies the atomic structure, the Valence orbit, and the behavior of semiconductors in a resting and active state.

### TSOEL2 – Welding for Electronics – 2 credits Lecture 10 hrs/Laboratory 30 hrs Pre-requisite – TFUEL

This course will allow the student to develop welding skills with different tools of different capacities and in different scenarios and surfaces. The student will also have the opportunity of joining, installing, and removing different components and cables.

#### TCLDG2 – Digital Logic Circuits and Laboratory – 4 credits Lecture 30 hrs/Laboratory 50 hrs Pre-requisites – AMATE, TFDA, TFUEL

This course discusses basic digital circuits such as: numerical bases, logic hatches, and adding circuits.

#### TCRIA2 – Commercial, Residential, and Industrial Alarms – 3 credits Lecture 20 hrs/Laboraotry 40 hrs Pre-requisite – TFUEL

In this course, the student will learn different combinations and installation of different audio and sound equipment.

# TLIPE 3 – Reading and Interpretation of Blueprints and Electronic Drawings – 3 credits Lecture 20 hrs/Laboratory 40 hrs

This course provides students with basic knowledge to read and interpret domestic and industrial electrical blueprints so that he/she can perform a charge census according to the specifications of the blueprint or schematic. It works with the reading and interpretation of scaled used in drawings, with electrical symbols, and with schematics of electrical circuits.

# TIEAVS3 – Installation of Electronic Equipment : Audio, Video, and Security – 4 credits Lecture 30 hrs/Laboratory 50 hrs Pre-requisite – TFUEL

In this course, the student will learn installation techniques of different types of audio, video, and sound equipment related to the field of security, communication, and entertainment considering the needs, scenario, and the customer.

#### TISES3 – Installation of Electronic Security Systems – 3 credits Lecture 20 hrs/Laboratory 40 hrs

During this course, the student will have the opportunity of designing, installing, and repairing electronic security systems such as: access and communication controls.

#### TREEA3 – Repair of Audio Equipment – 2 credits Lecture 10 hrs/Laboratory 30 hrs Pre-requisite – TIEAVS

In this course, the student will learn diagnosis and repair techniques and will identify and use the tools required correctly and safely.

#### 6.4.3 HEALTH PROGRAMS

#### ASSOCIATE DEGREE IN DENTAL ASSISTING WITH EXPANDED FUNCTIONS

BIO 111 – Basic Biology 3 credits Lecture 45 hrs

This course discusses Biology fundamentals. It also studies the structure and functions of living organisms including inheritance, adaptation, relation to its environment and organic evolution.

Conference: 3 hours per week

DAAS 100 – Principles of Infection Control

2 credits

Lecture 30 hrs

This course provides students the opportunity to relate with infection control principles and O.S.H.A. (Occupational Health and Safety Administration) requirements.

Conference: 2 hours per week

DAAS 103 – Dental Anatomy 3 credits Lecture 60 hrs

This course offers development of comprehensive knowledge of dental anatomy and its related structures. The student will recognize the most important anatomic structures of the mouth to executive intra-oral procedures performed by a Dental Assistant. The course studies general oral embryology and histology concepts.

Conference: 3 hours per week

### DAASL 101 – Dental Materials 5 credits Lecture 30 hrs/Laboratory 90 hrs

In this course the student studies the main fundamentals of chemical compositions and physical properties of materials used in Odontology. The students will work with laboratory practices designed to offer students an introduction of the use and handling of dental materials.

Conference: 2 hours per week Laboratory: 6 hours per week

### DAAS 102 – Human Anatomy and Physiology 2 credits Lecture 30 hrs

This course offers students a vision of the human body from a structural and functional point of view. It emphasizes the anatomical and physiological study of the human cell, tissues, organis and interaction of all systems in the body and the clinical aspects which affect them.

Conference: 2 hours per week

### DAASL 106 – Clinical Sciences and Dental Instruments I 5 Credits Lecture 60 hrs/Laboratory 60 hrs

This course provides students an introduction to the specialties of: restorative Odontology, Pedodontics, Ortodoncy. It emphasizes the modality of treatments and its clinical implications, function and instruments care. Students are instructed on the function of dental instruments and how to care for them. The student will learn the dental instruments used in the dental clinic and will learn to identify them and learn their usage.

The course provides the opportunity to practice with the handling and selection of dental instruments, their preparation and the measurements for their maintenance.

Conference: 4 hours per week Laboratory: 4 hours per week Pre-requisite: DAAS 103

### DAAS 107 – Dental Pharmacology and First Aid 2 credits Lecture 30 hrs

This course studies pharmacology principles and includes the technical practices of first aid which prepare the student to attend an emergency in a dental office. It offers the study of the classification of controlled substances, alcohol affects, health risks and aid centers. The student will take CPR (Cardio Pulmonar Resuscitation) training.

Conference: 2 hours per week

#### DAASL 104 – Dental Radiology and Laboratory I 5 credits Lecture 30 hrs/Laboratory 90 hrs

This course provides students an introduction to basic radiation concepts, its practical uses and risks as well as its function. It also presents angle techniques used to take intraoral x-rays and teaches particular care methods in patients. The Dental Assistant will learn about x-rays as required by Law.

The course provides students the opportunity to practice by using an x-ray dental unit dummy. This includes taking intraoral x-rays, development and assembly of x-rays emphasizing in the Dark Room techniques. In the middle of the course, the student will practice parallelism techniques and will demonstrate its efficiency by applying the knowledge acquired in the theory phase.

Conference: 2 hours per week Laboratory: 6 hours per week Pre-requisite: DAAS 103

#### DAAS 202 - Dental Microbiology and Oral Pathology 2 credits Lecture 30 hrs

This course provides students basic knowledge of microorganisms which can produce pathological diseases. The student will become familiarized with various sterilization methods and pathological condition according to its relation with odontology.

Conference: 2 hours per week

### DAASL 206 – Clinical Sciences and Dental Instruments II 5 credits Lecture 45 hrs/Laboratory 60 hrs

This course presents specialties of Pedodoncy, Prostodoncy, Endodoncy and Oral Surgery. It emphasizes in different modalities of treatment and their clinical implications. The students will learn the instruments, function and care and will practice with them through the preparation of trays used by a dentist. The course studies different methods to sterilize dental instruments and the students will learn how to take blood pressure, pulse and temperature as well as new techniques in dental implants. All theory learned will be applied regarding practical aspects of clinical odontology. The course offers the opportunity to develop skills and personal qualities which are necessary for a Dental Assistant.

Conference: 3 hours per week Laboratory: 4 hours per week Pre – Requisite: DAASL 106

DAAS 208 – Oral Embryology and Histology 2 credits Lecture 30 hrs This course offers and introduction to the study of primary oral tissues. It emphasizes the knowledge of mouth tissue and embryologic and histology development of the face and the structures of the oral cavity.

Conference: 2 hours per week Pre – Requisite: DAAS 102, DAAS 103

### DAASL 201 – Office Procedures and Dental Billing 4 credits Lecture 60 hrs

This course provides an introduction to basic procedures to receive and treat patients in a dental office; it emphasizes how to treat different kinds of patients and the temperaments they may encounter. It also studies all theory and practice related to the billing and handling of claims of dental health insurance. The student will work with similar cases of a real office through assigned cases and the use of the Dental Max Program.

Conference: 4 hours per week

Pre – Requisites: DAASL 101, 104, 106, 206 and DAAS 103

### DAAS 214 – Dental Radiology Laboratory II 2 credits Laboratory 60 hrs

In this course, the student will practice with the use of an angle bisection technique. It offers a general review of the basic concepts related to dental radiology.

Laboratory: 4 hours per week Requisites: DAAS 104

### DAASL 300 – Preventive Dentistry 3 credits Lecture 30 hrs/Laboratory 60 hrs

This course presents information, basic and operational concepts of Preventive Odontology by emphasizing in the areas of diseases prevention in the dental support structures (periodontal diseases), common isolation methods of the operational field and prevention of dental cavities. The course offers laboratory and clinic experiences.

Conference: 2 hours per week Laboratory: 4 hours per week

Pre – Requisites: DAAS 100, DAASL 101, DAAS 102, DAASL 103,

DAASL 106

## DAAS 403 - Morphology and Concepts of Oral Anatomy/Laboratory of Restoraative Procedures 3 credits

Lecture 15 hrs/Laboratory 60 hrs

This course offers students the information and basic and operational concepts of the gingival retraction, isolation methods for different restorations, fabrication of temporary

crowns and bridges and stitches removal. The student will reinforce the skills learned in the Preventive Odontology course and offers laboratory and clinic experiences.

Conference: 1 hour per week Laboratory: 4 hours per week

Pre-requisites: All courses at levels 100, 200 and 300

### DAAS 415 – External Clinical Practice 4 credits

#### Lecture 15 hrs/Externship 180 hrs

This course allows students to put in practice the skills and knowledge acquired in the academic phase. It consists of an academic term of two (2) days a week in the program previously discussed. A minimum of practice hours is required and an evaluation of the dentist who supervised him/her during the class. The student will meet one (1) hour per week with the Practice Coordinator to strengthen weak areas or clear doubts.

Conference: 1 hour per week Practice: 12 hours per week

Pre-requisites: All courses at levels 100, 200 and 300

### DAAS 515 – Dental Assisting with Expanded Functions Externship and Internship 6 credits

#### Lecture 15 hrs/Externship-Internship 240 hrs

This course has been designed for students to perform in patients different types of restorations in primary and permanent teeth. The students will broaden their skills in taking x-rays, four-hands assistance and placing the rubber dam. This practice will be carried out in the Dental Clinic of the Institution.

The student will attend an external practice center (dental office) where he/she can be in contat with patients and real conditions of such office. It consists of an academic term, one day a week in a program previously discussed. The minimum of practice hours is required and the evaluation of the dentist who supervised the student during that time. The student will meet once a week with the Practice Coordinator to strengthen weak areas or clear doubts.

Clinical Practice: 8 hours per week External Practice: 8 hours per week

Pre–requisites: DAASL 300, DAAS 403, DAAS 415

Seminar: 1 hour per week

### DAAS 514 – Dental Assistant Board Exam Review Seminar 1 credit

Lecture 30 hrs

This course is an intensive review of the dental theories and common skills of the Dental Assistant with Expanded Functions. The student will practice with different tests designed to simulate the reviews offered by the Dental Examining Board. Instruction will be provided regarding the techniques to take such tests.

Conference: Two (2) hours per week including the demonstration of specific skills and

the instruments in the laboratory (when necessary).

Pre-requisites: All courses of levels 100 and 200; DAAS 300 and 400

Co-requisites: DAAS 515

#### GENERAL COURSES AND GENERAL EDUCATION ELECTIVES

## COM 101 – Introduction to Computers 3 credits

Lecture 30 hrs/Laboratory 30 hrs

This course offers an analysis of the functions of a computer programmer, the programs and different elements that make up data processing; techniques to make programs and the development of tables are also discussed. It studies a general introduction of the computer concepts and the hardware / software terminology; history and development of a computer until the present time and the use of a computer in businesses and daily life.

Conference: 4 hours per week Laboratory: 2 hours per week

### SPA 111 – Basic Spanish 3 credits Lecture 45 hrs

This course offers a study of the Spanish Gramar with a structural, formative and functional focus making emphasis in the development of basic competencies in language arts, specially in oral, written and reading expression.

Conference: 3 hours per week

SPA112 – Basic Spanish II – 3 credits

Lecture 60 hrs

**Pre-requisites – SPA111** 

This course has been designed as a continuation of Basic Spanish I. It studies the main literary genre such as: poetry, story, essay, and theatre and studies the creative process of these literary works. It works with the written production of the student who must produce simple sentences with sense, paragraphs, and essays.

#### MAT 100 – General Mathematics I 3 credits Lecture 45 hrs

This course offers and introduction to the fundamental basics of mathematics and its applications. It studies the fundamental operations with natural numbers, decimals, fractions and percentages.

Conference: 3 hours per week

ENG 111 – Basic English (Grammar I) 3 credits Lecture 45 hrs This course studies the fundamentals of the English language with emphasis in grammar and its structure with the purpose of improving students' skills. In case a placement test is required, the student will need to take ING 098.

Conference: 3 hours per week

### PSY 100 – Skills Development 3 credits Lecture 45 hrs

This course has been designed to present students with the necessary skills to develop assertiveness and improve their possibilities of academic success.

Conference: 3 hours per week

#### ENG 112 – Basic English (Grammar II) 3 credits Lecture 45 hrs

This course studies the fundamentals of the English language with emphasis in grammar and language and develops oral communication.

Conference: 3 hours per week

Pre-requisite: ENG 111

### MAT 101 – General Mathematics II 3 credits Lecture 45 hrs

This course provides an introduction to basic mathematics fundamentals and its applications. It also studies fundamental operations with natural numbers, decimals, fractions, percentages, radicals, weights, measurements, areas, volume, first grade operations and metric system.

Conference: 3 hours per week

Pre-requisite: MAT 100 or approve a placement test

### ENG 113 – Conversational English 3 credits Lecture 45 hrs

This course emphasizes in oral communication, vocabulary development and the handling of daily life situations by using the English language. The student will participate in dialogues, class presentations and written exercises.

Conference: 3 hours per week

Pre – Requisite: ENG 112

PSY 302 – Human Relations 3 credits Lecture 45 hrs This course helps students develop positive characteristics and qualities which allow them to function adequately in their treatment with others. This includes a possible modification of attitudes.

Conference: 3 hours per week

ART 205 – Musical Culture 3 credits Lecture 45 hrs

This course presents students with different music styles of Puerto Rico and different cultures. Students will learn the essential value of music to achieve sensibility in the understanding of music which is one the road to the human spirit's enrichment.

Conference: 3 hours per week

ART 300 – Introduction to Theater 3 credits Lecture 45 hrs

This course develops in students the aesthetic appreciation of dramatic art as well as analysis and identification skills of sociocultural, collective and individual values which form a play. It also provides knowledge of different theatrical genders and elements as well as authors from different countries.

Conference: 3 hours per week

CMM 111 – Effective Oral Communication 3 Credits Lecture 45 hrs

This course presents nature and basic oral communication principles. It also emphasizes in ideas expression methods so that the student achieves better communication in his/her personal and professional life.

Conference: 3 hours per week ETH 303 – Ethics 3 credits
Lecture 45 hrs

This course offers a description of philosophy and practice in commercial ethics, its relations and implications in human behavior and in business. It analyzes and studies how education flows in society and emphasizes drugs and alcohol abuse in the workplace.

Conference: 3 hours per week

ETH 305 – Cinema and Society 3 credits Lecture 45 hrs

This course has been designed to evaluate how cinema and other forms of telecommunications are reflected and influence the ethical values of American society. It

also examines the roles that cinema provoques and its responsibility as well as social stereotypes and constructions that may affect life, values and behavior of human beings.

Conference: 3 hours per week

HUM 301 – Occident Civilizations I 3 credits Lecture 45 hrs

This course offers an analysis of the origin of the human being and the occidental cultural process. It discusses different evolution theories and studies ancient civilizations, classic Greek and Roman culture by comparing both to their contribution in the formation of a humanistic conscience in the student.

Conference: 3 hours per week

HUM 302 – Occident Civilizations II 3 credits Lecture 45 hrs

This course studies the apparition of Christianity and the greek-roman flow and the Middle and Modern Ages changes by comparing both periods. It also offers readings and analysis of representative plays of the thought of these periods.

Conference: 3 hours per week Pre-requisite: HUM 301

HUM 303 – Puerto Rico and its Culture 3 credits Lecture 45 hrs

This course offers a cultural path of the history of Puerto Rico from the origins of the social indigenous formation to the present time through the analysis of social, political and economic aspects.

Conference: 3 hours per week

HUM 305 – Religions of the World 3 credits Lecture 45 hrs

This course analyzes different religions of the World from a critical perspective and not with an indoctrination posture. The student will comprehend that religion is a reflection of how different human groups know reality, express it and represent it. The students will be able to study the controversial theme of religion with an integral vision.

Conference: 3 hours per week

PSY 305 – Psychology of Ageing 3 credits Lecture 45 hrs This course offers a study and analysis of the fundamental concepts of the elderly and society. It discusses social changes and its impact in the individual. The course emphasizes in the development of social and physcological development of an individual and the adjustment to this change. It also offers an analysis of the problematic of elderlies in Puerto Rico from the actual sociocultural perspective and discusses the process of loss, grief and death and its implications in elderlies.

Conference: 3 hours per week

PSY 315 – Human Sexuality 3 credits Lecture 45 hrs

This course promotes the study and analysis of sexuality from an integral and social perspective. It promotes the analysis of one self for personal and professional improvement when establishing a balance between what is and what is not human sexuality and what are its emotional, social, moral and spiritual implications. The course also analyzes controversy facts of sexuality in the actual Puertorrican culture and that of the past decades with the purpose of establishing a comparison and critical analysis of evolution of our values in this aspect.

Conference: 3 hours per week

### 7.0 HOLIDAYS WITHIN THE ACADEMIC CALENDAR FOR P.R. OPERATIONS

DATE	HOLIDAY
January 1st	New Year's Day
January 6th	Three Kings Day
2nd Monday in January	Eugenio María de Hostos Day
3rd Monday in January	Martin Luther King Day
3rd Monday in February	Washington Day (Presidents Day)
March 22nd	Slavery Abolition Day
3rd Monday in April	José de Diego Day
last Monday in May	Memorial Day
4th of July	Independence Day
3rd Monday in July	Muñoz Rivera Day
July 25 <sup>th</sup>	Constitution Day
July 27th (celebrated on Monday)	José Celso Barbosa Day
1st Monday in September	Labor Day
October 12th	Columbus Day
November 11th	Veterans Day
4th Thursday in November	Thanksgiving Day
November 19th	Puerto Rico Discovery Day
December 25th	Christmas Day

### (Holidays applicable to classes in Orlando, Florida)

DATE	HOLIDAY
January 1st	New Year's Day
3rd Monday in January	Birthday of Luther King
last Monday in May	Memorial Day
4th of July	Independence Day
1st Monday in September	Labor Day
October 8	Columbus Day
November 11	Veterans Day
4th Thursday in November	Thanksgiving Day
December 25th	Christmas Day

Note: These dates may vary and if necessary, classes will not be offered on these dates.

### 7.1 ACADEMIC CALENDAR FOR P.R. OPERATIONS (TECHNICAL PROGRAMS)

Term	Length	Events	Holidays
I	August 15, 2022 to November 11, 2022	Enrollment: July 11 to August 13 Classes start: August 15 Late enrollment and changes: August 15 to 19 Academic recess: September 17 to 25 Return from recess: September 26 Half-term grades: September 19 to 22 Faculty evaluations: October 3 to 6 Evaluation of faculty by students: September 26 to October 13 Final tests: November 7 to 10 Last day for make-up work: November 1 Last day for withdrawal: November 1 Last day of class: November 10 Hand-in grades: November 10	<u>2022</u>
II	November 14, 2022 to February 17, 2023	Enrollment: October 10 to November 10 Classes start: November 14 Late enrollment and changes: November 14 to 21 Half-term grades: December 19 to 22 Faculty evaluations: January 23 to 26 Evaluation of faculty by students: December 19 to January 19 Final tests: February 13 to 16 Last day for make-up work: February 7 Last day for withdrawal: February 7 Last day of class: February 16 Hand-in grades: January 17 to 24	September 5 – Labor Day  September 17 to 25 – Hurricane Fiona Recess October 10 – Columbus Day November 11 – Veterans' Day November 19 – Discovery of Puerto Rico (observed Friday, November 18) November 24 and 25 – Thanksgiving Recess Decmber 23 to January 8, 2023 – Christmas Recess
II Especial	November 28, 2022 to February 17, 2023	Enrollment: October 17 to November 23 Classes start: November 28 Late enrollment and changes: November 28 Half-term grades: January 9 to 12 Faculty evaluations: January 16 to 27 Evaluation of faculty by students: January 9 to 27 Final tests: February 13 to 16 Last day for make-up work: February 9 Last day for withdrawal: February 9 Last day of class: February 16 Hand-in grades: February 17 to 24	2023  January 1 – New Year's Day (observed Monday, January 2, 2023) January 6 – Three Kings Day January 16 – Martin Luther King February 20 – Presidents' Day March 2 – Citizenship Day March 22 – Slavery Abolition
III	February 21, 2023 to May 12, 2023	Enrollment: January 23 to February 18 Classes start: February 21 Late enrollment and changes: February 20 to 24 Half-term grades: March 27 to 31 Faculty evaluations: March 27 to April 5 Evaluation of faculty by students: March 20 to April 5 Final tests: May 8 to 11 Last day for make-up work: May 2 Last day for withdrawal: May 2 Last day of class: May 11 Hand-in grades: May 12 to 19	April 6 and 7 – Holy Week Recess May 29 – Memorial Day June 19 – Juneteenth Day July 4 – Independence Day July 25 – Constitution of Puerto Rico July 7 – José Celso Barbosa September 4 – Labor Day October 9 – Columbus Day November 11 – Veteran's Day (observed Friday, November 10)
IV	May 15, 2023 to August 11, 2023	Enrollment: April 17 to May 13 Classes start: May 15 Late enrollment and changes: May 15 to 19 Half-term grades: June 20 to 23 Faculty evaluations: June 26 to July 5 Evaluation of faculty by students: June 12 to 22 Final tests: August 7 to 10 Last day for make-up work: August 1 Last day for withdrawal: August 1 Last day of class: August 10 Hand-in grades: August 11 to 18	November 19 – Discovery of Puerto Rico (observed Monday, November 20) November 23 and 24 – Thanksgiving Recess Deecmber 22 to January 7, 2024 – Christmas Recess
V	August 14, 2023 to November 3, 2023	Enrollment: July 10 to August 12 Classes start: August 14 Late enrollment and changes: August 14 to 18 Half-term grades: September 18 to 22 Faculty evaluations: September 18 to 28 Evaluation of faculty by students: September 11 to 21 Final tests: October 30 to November 2 Last day for make-up work: October 24 Last day for withdrawal: October 24 Last day of class: November 2 Hand-in grades: November 3 to 9	

Term	Length	Events	Holidays
VI	November 13, 2023 to February 16, 2024	Enrollment: October 16 to November 9 Classes start: November 13 Late enrollment and changes: November 13 to 17 Half-term grades: December 18 to 21 Faculty evaluations: January 8 to 18 Evaluation of faculty by students: December 11 to 21 Final tests: February 12 to 15 Last day for make-up work: February 6 Last day for withdrawal: February 6 Last day of class: February 15 Hand-in grades: February 16 to 23	
VII	February 20, 2024 to May 10, 2024	Enrollment: January 16 to February 16 Classes start: Tuesday, February 20 Late enrollment and changes: February 20 to 26 Half-term grades: March 25 to 27 Faculty evaluations: March 25 to April 4 Evaluation of faculty by students: March 18 to April 27 Final tests: May 6 to 9 Last day for make-up work: April 30 Last day for withdrawal: April 30 Last day of class: May 9 Hand-in grades: May 9 to 16	2024  January 1 – New Year's Day January 6 – Three Kings Day (observed Friday, January 5) January 15 – Martin Luther King February 19 – Presidents' Day March 2 – Citizenship Day (observed Friday, March 1)
VIII	May 13, 2024 to August 9, 2024	Enrollment: April 15 to May 11 Classes start: May 13 Late enrollment and changes: May 13 to 17 Half-term grades: June 24 to 28 Faculty evaluations: June 24 to July 3 Evaluation of faculty by students: June 17 to 27 Final tests: August 5 to 8 Last day for make-up work: July 30 Last day for withdrawal: July 30 Last day of class: August 8 Hand-in grades: August 9 to 16	March 22 – Slavery Abolition  March 28 and 29 – Holy Week Recess  May 27 – Memorial Day  June 19 – Juneteenth Day  July 4 – Independence Day  July 25- Constitution of Puerto Rico  July 27 – José Celso Barbosa  (observed Friday, July 26)  September 2 – Labor Day  October 14 – Columbus Day  November 11 – Veteran's Day
ıx	August 12, 2024 to November 1, 2024	Enrollment: July 8 to August 10 Classes start: August 12 Late enrollment and changes: August 12 to 16 Half-term grades: September 16 to 20 Faculty evaluations: September 16 to October 3 Evaluation of faculty by students: September 9 to 20 Final tests: October 28 to 31 Last day for make-up work: October 22 Last day for withdrawal: October 22 Last day of class: October 31 Hand-in grades: November 1 to 8	November 19 — Discovery of Puerto Rico November 28 and 29 — Thanksgiving Recess Deecmber 24, 2024 to January 6, 2025 — Christmas Recess
х	November 4, 2024 to February 7, 2025	Enrollment: October 7 to November 2 Classes start: November 4 Late enrollment and changes: November 4 to 8 Half-term grades: December 9 to 13 Faculty evaluations: December 9 to 12 Evaluation of faculty by students: December 2 to 12 Final tests: February 3 to 7 Last day for make-up work: January 28 Last day for withdrawal: January 28 Last day of class: February 6 Hand-in grades: February 7 to 14	

This calendar is subject to change due to natural disasters or any other unforeseen events.

### 7.3. ACADEMIC CALENDAR FOR MECH-TECH INSTITUTE OF ORLANDO, FLORIDA

Term	Length	Events	Holidays
ı	August 15, 2022 to November 4, 2022	Enrollment: July 11 to August 13 Classes start: August 15 Last enrollment and changes: August 15 to 19 Mid- term grades: September 19 to 23 Faculty Evaluations: September 12 to 15 Students Evaluations to Faculty: September 19 to 29 Final Tests: October 26 to November 3 Last day for make-up work: October 25 Last day for withdrawal: October 25 Last day of classes: November 3 Grades: November 4 to 10	Sep. 5, 2022- Labor Day October 10, 2022-Columbus Day November 12, 2022- Veterans Day
п	November 14, 2022 to February 17, 2023	Enrollment: October 11 to November 10 Classes start: November 14 Last enrollment and changes: November 14 to 18 Mid- term grades: December 19 to 22 Faculty Evaluations: January 9 to 12 Students Evaluations to Faculty: December 12 to 22 Christmas Recess: December 23, 2022 to January 8, 2023 Final Tests: February 14 to 16 Last day for make-up work: February 6 Last day for withdrawal: February 6 Last day of classes: February 16 Grades: February 17 to 24	Nov. 24-25, 2022 Thanksgiving Recess  December 23, 2022 to January 8, 2023- Winter  Christmas Recess  January 16, 2023- Martin Luther King Day
111	February 20, 2023 to May 12, 2023	Enrollment: January 18 to February 17 Classes start: February 20 Last enrollment and changes: February 20 to 24 Mid- term grades: March 27 to 31 Faculty Evaluations: April 3 to 6 Students Evaluations to Faculty: March 20 to 30 Final Tests: May 8 to 11 Last day for make-up work: May 2 Last day for withdrawal: May 2 Last day of classes: May 11 Grades: May 12 to 19	February 13, 2023 – President's Day April 7, 2023 – Good Friday
IV	May 15, 2023 to August 11, 2023	Enrollment: April 17 to May 12 Classes start: May 15 Last enrollment and changes: May 15 to 19 Mid- term grades: June 20 to 23 Faculty Evaluations: June 26 to 29 Students Evaluations to Faculty: June 12 to 22 Final Tests: July 31 to August 9 Last day for make-up work: July 27 Last day for withdrawal: July 27 Last day of classes: August 09 Grades: August 11 to 18	May 29, 2033- Memorial Day June 19, 2023- Emancipation Day July 4, 2023- Independence Day
v	August 14, 2023 to November 3, 2023	Enrollment: July 10 to August 11 Classes start: August 14 Last enrollment and changes: August 14 to 18 Mid- term grades: September 18 to 22 Faculty Evaluations: September 25 to 28 Students Evaluations to Faculty: September 11 to 21 Final Tests: October 30 to November 2 Last day for make-up work: October 24 Last day for withdrawal: October 24 Last day of classes: November 2 Grades: November 3 to 13	Sep. 4, 2023 - Labor Day October 9, 2023 - Columbus Day November 11, 2023 - Veterans Day (Observed November 10, 2023)

This calendar is subject to change due to natural disasters or any other unforeseen events

### 8.0 FACULTY

### 8.1 Caguas Main Campus Faculty

### 8.1.1 Technical Programs

Med	cánicas	Soldadura	Refrigeración y Aire Acondicionado	Cursos Complementarios
Ángel Suero Carlos Figueroa Daniel Colón Francisco Molina Jomar Cerich José A. Sierra José Guzmán Juan Fernández Juan Guzman	Kenneth De Jesús Lenny González Misael Ortiz Omar Rivera Oscar Trinidad Richard Whitten Víctor Cruz William Rivera	Rafael Rivera Edison Gamboa Diego Zalduondo Daniel Colón Fernando León Orlando Miranda  Sistemas de Seguridad  José Ferrer	Luis G. Pérez Luis Pérez Ríos  Electricidad Industrial  Luis Pérez Ríos Rafael Rivera Luis Torres Melissa Díaz Wilfredo Caraballo Angel Rivera	Melissa Díaz Olga Álamo Eric Camacho Rafael Rivera Rebecca Carrión Maribel Cruz Medellin López

### 8.1.2 Caguas Main Campus Associate Degree Faculty

Nombres	Grados Académicos	Institución de Procedencia	
Álamo, Olga	Maestría	Universidad de Puerto Rico	
Ayala, Hector	Grado Asociado	Instituto Tecnologico de Puerto Rico	
Carrión, Rebecca	Bachillerato	Universidad de Puerto Rico	
Cruz, Juan	Maestría	Universidad del Turabo	
Cruz, Maribel	Bachillerato	Universidad de Puerto Rico	
De León, Luis	Grado Asociado	Mech Tech College	
Díaz, Melissa	Maestría	Universidad Politécnica de Puerto Rico	
Figueroa, Carlos	Bachillerato	Universidad Politécnica	
García, Adolfo	Grado Asociado	Instituto Tecnológico de Puerto Rico	
González, Norberto	Bachillerato	Universidad de Puerto Rico	
Guzmán, José	Bachillerato	Universidad del Turabo	
Molano, Ángela	Grado Asociado en Troquelería	Universidad de Puerto Rico	
Padilla, Virmarie	Doctorado	Universidad de Puerto Rico	
Pérez, Luis	Maestría	Universidad de Puerto Rico	
Rivera, Rafael	Bachillerato	Universidad de Puerto Rico	
Torres, Luis	Bachillerato	Universidad de Puerto Rico	
Profesores Sustitutos:			
1. Cruz, Juan	1. Cruz, Juan 2. Pérez Ríos, Luis 3. Dr. Cesar Toro		

### 8.2 Mayagüez Campus Faculty

Mechanics	Collision Repair	Welding	Complementary Courses	
Joel Acevedo Cruz Eduardo Gil Nelson González Rafael Irizarry Alfred Jaxon Luis Pérez Torres Benigno Sanabria Edgar Torres David Troche Martí	Juan Morales Jose Martinez Yamil Mercado Edwin Rodriguez  Electricity Adolfo Castillo Leslie Rodríguez	Wilfredo Oliveras Pedro Román	Angel Castillo Genaro Lugo Nannette Villanueva Leslie Rodríguez	
Substitute Instructors				
* Yamil Mercado				

### 8.3 Bayamón Branch Campus Faculty

Mechanics	Metals	Complementary Courses
Jose Ricardo Lopez Francisco Flores Juan Gorritz Remberto Negrón Ángel Sánchez Angel Rivera Juan Soto Josue Romero Hector Garcia Alberto Vélez Diego Ayala Hamed Hernandez	Christopher Esquilín Carlos Roque Refrigeration Luis Martinez Omar Figueroa	Remberto Negrón Francisco Flores Rossana Vélez  Electricity  Eduardo Diaz Francisco Meléndez Orlando Torres
<b>Substitute Instructors</b>		Eric Rivera

### 8.4 Vega Baja Faculty

Mec	hanics	Electricity and Refrigeration	Welding	Complementary Courses
Jorge Adorno Diego Ayala Juan Bruno Josué Candelaria	Manuel Rivera Nicolás Sánchez Rafael Serrano Alberto Vélez	Francisco Meléndez Geovannie Sánchez	Manuel Cruz Felipe Rivera	Yanira González Rossana Vélez
Héctor García Heriberto Juarbe Ismael Negrón Marcos Nieves		Collision Repair	Substitute Instructor	s
		Cristóbal Báez Francisco Otero Inior Soto	Carlos Cruz Carla Fontán Eric Rivera Francisco Meléndez	

### 8.4.2 Associate Degree Faculty (Vega Baja)

Name	Academic Degree	Institution of Origin	
Luis De León	Associate	Mech-Tech College	
Yanira González	Masters	Central University of Bayamón	
Francisco Meléndez	Bachelor's	University of Puerto Rico	
Ismael Negrón	Bachelor's	Pontificial Catholic University of Puerto Rico	
Norma Negrón	Bachelor's	University of Puerto Rico	
Rosa Toledo	Bachelor's	University of Puerto Rico	
Jacinto Urbino	Masters	Specialized Studies Center of Puerto Rico	
Lorna Vázquez	Bachelor's	Sacred Heart University	
Rosanna Vélez	Bachelor's	University of Puerto Rico	
<b>Substitute instructors:</b>	*Carla Fontán	*Francisco Meléndez *Carlos Cruz	

### 8.5 Ponce Branch Campus Faculty

Mechanics	Welding	Complementary Courses
García, Carlos	Gotay, Nélida	Rodríguez, Leslie
García, William	Quezada, Fernando	Tacoronte, Julio
Meléndez, Elimanuel	Rivera, Alberto	
Robles, Rafael	Santos, Jimmy	
Tacoronte, Julio	Torres, José	
Vega Martínez, Reynaldo	Vega, Cruz	
	Ojeda, Josue	
Substitute Instructors: *Carlos Cruz	*Cruz Vega * Julio Illanas *	Leslie Rodríguez

### 8.7 Mech-Tech Institute of Orlando, Florida Branch Campus Faculty

Instructor's Name	Program of Study	Credential	Institution of Origin
	Diesel Mechanics		
Víctor Agosto		Military Training	US Army
Martin Burgos	Industrial Welding	Diploma	Mech Tech Institute
Juan R. Colón	Industrial Welding	Diploma	Trina Padilla de Sanz High School
Custodio Gonzalez	Automotive Mechanics	Diploma	University of Puerto Rico (Engineering)
Augusto Vila	Automotive Mechanics	Certificate	Mech-Tech College Bayamón, Puerto Rico
Gabriel Pagán	Racing Mechanics	High School Diploma	Escuela Superior Vocacional Dr. Pedro Perea Fajardo, Mechanics Mayaguez PR
Jaime Salgado	Industrial Welding	Diploma	Mech-Tech Institute
Ricardo Gutiérrez	Diesel Mechanics	Diploma	Mech-Tech Institute
Juan Carlos Rosario	Racing Mechanics	High School Diploma Work Experience	Continental Academy
Jose Morales	Computer Class	College credits	MBTI Aguadilla PR Esc. Juan Suarez
		High School Diploma	Peregrina, Aguadilla PR

#### 9.0 RIGHT TO CORRECT THE CATALOG

The provisions contained in this publication should not be censored as an irrevocable contract between an applicant or student and MTC/MTI . The Institution reserves the right to amend this Catalog while it is in effect. Notice of all changes that this Catalog undergoes will be given and set forth for the benefit of the entire institutional community, through the President's Office and will be incorporated as an integral part of this document.

#### 9.1 SPECIAL REMEDIAL MEASURES

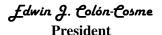
The contents of this Catalog should not be interpreted as limiting the authority of MTC/MTI's administration to initiate and adopt measures necessary in unforeseen circumstances not contemplated in this document.

#### 9.2 SEPARATION OF THE PROVISIONS OF THIS CATALOG

The unconstitutionality or non-execution of any of the parts contained in this Catalog will not affect the validity of its remaining parts.

#### 9.3 APPROVAL OF THIS CATALOG

The President of MTC/MTI approved this revised edition of the Catalog on April 3, 2023.



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