# **School Catalogue**



2016 - 2017

Miami-Dade County Public Schools

GEORGE T. BAKER AVIATION TECHNICAL COLLEGE

3275 N.W. 42<sup>nd</sup> Avenue • Miami, FL 33142 • 305-871-3143 • Fax 305-871-5840

<a href="http://www.bakeraviation.edu">http://www.bakeraviation.edu</a>

## MIAMI-DADE COUNTY PUBLIC SCHOOLS SCHOOL BOARD MEMBERS

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Mr. Alberto M. Carvalho

#### **GEORGE T. BAKER AVIATION TECHNICAL COLLEGE**

#### **ADMINISTRATIVE STAFF**

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#### **SUPPORT STAFF**

Ms. Vivian Garcia, Counselor Ms. Claudia McEvoy, Financial Aid Officer Mr. Luis Reyes, Placement Specialist

#### **DEPARTMENT CHAIRS**

Mr. Reynaldo Fernandez, General Mr. Ricardo Flores, Airframe Mr. Patrick Heron, Powerplant Mr. Howard Carter, Avionics

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#### **GEORGE T. BAKER AVIATION TECHNICAL COLLEGE**

#### **Facts**

Miami-Dade County Public Schools offered its first aviation training program in 1939 at Miami Senior High School. The program was moved to the former Roosevelt Hotel in 1942 which later became Lindsey Hopkins Technical Education Center. In 1958 the school was relocated to its present site, the former National Airlines maintenance facility. The land was donated to Dade County Public Schools by Mr. George T. Baker. In 1964 the buildings were converted into shops and classrooms and dedicated in memory of Mr. Baker.

George T. Baker Aviation Technical College is a public tax-supported school operated by the Miami-Dade County Public Schools (M-DCPS). It is certificated by the Federal Aviation Administration (FAA) for the training of entry-level aircraft mechanics, and avionics technicians and accredited by the Council on Occupational Education. The 10-acre campus is located adjacent to Miami International Airport. The school contains 178,000 square feet of classrooms, shops, and administrative offices.

George T. Baker Aviation Technical College offers a very specialized aviation curriculum and is one of two non-degree granting public institutions in the State of Florida offering the Airframe Mechanic and Powerplant Mechanic programs. The school also offers Electronics and Avionics programs.

Students at George T. Baker Aviation Technical College are trained on industry-standard equipment. The curriculum for all programs correlates with the Curriculum Frameworks developed by the Florida Department of Education. The Aircraft Airframe Mechanic and Powerplant Mechanic programs are also approved by the FAA. Representatives from FAA visit the school frequently and conduct reviews to ensure compliance with the Federal Aviation Regulation (FAR) Part 147.

Representatives from the aviation, electronics and avionics industries serve as advisory committee members to ensure that the course of study is relevant to the actual conditions found in the workplace.

#### **Facilities**

George T. Baker Aviation Technical College is easily accessible and centrally located in Miami-Dade County at 3275 Northwest 42nd Avenue (LeJeune Road) directly east of Miami International Airport. LeJeune Road is one of the main north/south arteries in the county. State Road 112 Expressway is located one-half mile north of the school and State Road 836, Dolphin Expressway is located one and one-half miles south of the school. Both expressways permit easy connection to Interstate 95. The school's unique location makes it easily accessible for public bus transportation.

The following specialized training areas support the programs at the school:

- Hydraulics Shop
- Propeller Shop
- Composite Shop
- Paint Shop
- Sheetmetal Shop
- Engine Shop
- Welding Shop
- Two Reciprocating PowerPlant Shops
- Test Cell
- Electronics Laboratory
- 18-multiuse classrooms
- Two 18-station computer laboratories
- Media Center

#### Mission of School

The mission of George T. Baker Aviation Technical College is to provide training to persons interested in aviation maintenance, electronics, and avionics to become an integral part of the industry. To accomplish this mission, the school must enhance the curriculum, utilize industry resources, and encourage students to obtain their federal aviation administration certificates or federal communications commission license, and place students in jobs that are related to their training. The academic and technical expectations established by the instructional staff and the strong educational leadership provided by the principal make it possible for the school to accomplish this mission.

Students are encouraged to believe in themselves and strive toward the highest goals in their chosen career. The staff at George T. Baker Aviation Technical College is dedicated to providing supportive educational programs and services needed to help students become productive, well adjusted, and contributing members of our society. The school has a commitment to provide a quality program of instruction for each individual and recognizes the importance of academic

competencies as well as the need for desirable work attitudes.

#### **Faculty**

The instructional staff is certified by Miami-Dade County Public Schools and the State of Florida. The Aviation Mechanic teachers are also licensed by the FAA as Airframe Mechanic and Powerplant Mechanics. Most of the instructors hold a Bachelors or Equivalency Degree and many of the instructors hold a Master's Degree. Teachers and administrators are listed in the Appendix.

#### Accreditation

George T. Baker Aviation Technical College is approved as a training site by the Florida Department of Education and the Department of Veteran's Affairs. The school is accredited by the Council of Occupation Education (COE) and the National Center for Aircraft Technician Training (NCATT). It operates under the Federal Aviation Administration Certificate # CT9T072R and complies with the requirements of Part 147 of the Federal Aviation Administration regulations.

Requests for additional information on the policies, standards, or procedures of the Accrediting Commission of the Council on Occupational Education should be addressed to:

Dr. Gary Puckett
Executive Director/President
Accrediting Commission
Council on Occupational Education

7840 Roswell Road Building 300, Suite 325 Atlanta, Georgia 30350

770/396-3898

WATS 800-917-2081 FAX 770/396-3790 WWW Site: www.council.org

E-Mail Address: puckettg@council.org

#### **Professional Memberships**

The school encourages all personnel to become actively involved in professional organizations and associations that support the school and serve the aviation industry. The school holds membership in the following organizations:

- Council on Occupational Education
- Aviation Technician Education Council
- Florida Vocational Association
- Dade Association of Vocational, Adult, Career, and Community Education
- Miami Maintenance Management Council
- Greater Miami Aviation Association
- Aircraft Electronics Association
- Vocational Industrial Clubs of America
- Florida Association of Student Financial Aid Administrators
- Northwest Dade Chamber of Commerce
- Association for Supervision and Curriculum Development
- Adult and Community Educators of Florida
- National Aeronautics Association

#### **ADMISSION INFORMATION**

#### **Admission Policy**

The Admission Policy of George T. Baker Aviation Technical College is:

Any person at least 16 years of age who has graduated or withdrawn from high school may enroll as an adult student.

Students may obtain general information and an application for admission by visiting the school between 8:00 a.m. and 8:00 p.m.

#### **International Students**

Students holding an F-1 (academic) and M-1 (vocational) student visas should register at the New Student Reception Center office located at 489 E. Drive, Miami, FL 33166. The phone number for the New Student Reception Center is 305-883-1445.

After this initial registration, students should follow the regular registration Oprocedures at George T. Baker Aviation Technical College. All other foreign/non-resident students may register at the technical college.

#### **Testing Requirements**

All adult students enrolled in a program at George T. Baker Aviation Technical College must take the Test of Adult Basic Education before registration. Adult students are TABE exempt if: 1.) they have earned a standard high school diploma from the State of Florida issued on or after 2007 or 2.) If they have an Associate of Applied Science Degree or higher from an accredited institution.

#### **Academic Year**

The academic year is divided into three trimesters of approximately 16 weeks in length. The trimester typically begins in August, December, and April. A summary of the academic calendar is listed in the Appendix.

#### Registration

All students are required to meet with a counselor or advisor prior to registering for classes. During this session, the counselor or advisor will discuss programs offered, cost, academic advisement, and testing requirements. The counselor or advisor will also assist students with the completion of an Education Plan the student registration/intent form, and the Performance Based Funding Declaration of Vocational Intent.

The counselor or advisor must review and initial all approved courses selected by the student each trimester. Students are required to complete a program before enrolling in another program area. Exceptions to this policy must be approved by an administrator.

Students are encouraged to register for a full trimester. All financial aid and agency-sponsored students must register for a full trimester. Visa students must register full time (25 hours of instruction a week) and are encouraged to register for the full trimester. Priority status is granted if students meet criteria based on policy available from the student services department.

#### **Waiting List**

When classes are filled to capacity, a chronological waiting list of eligible students is maintained. The prospective student's name is advanced in order as space becomes available.

#### Transfer of Course Credit from Other Schools

George T. Baker Aviation Technical College may award credit for instruction satisfactorily completed at an accredited university, college, junior college, vocational, technical, trade, high school, certificated aviation maintenance technician school, or military technical school provided all criteria are met.

Students transferring credit from another institution are admitted on a probationary status pending the receipt and evaluation of all official records from the previous school and/or the military. It is the student's responsibility to request that an official transcript and school catalog, if necessary, be mailed directly to the Student Services Department at George T. Baker Aviation Technical College. After the official transcript is received and reviewed, the student is notified to schedule an appointment with the Student Services Administrator to receive the notification of credits awarded by George T. Baker Aviation Technical College.

Transcripts are evaluated based on curriculum requirements currently approved for George T. Baker Aviation Technical College under Certificate #CT9TO72R. Credit will be awarded only for subjects, curriculum areas, or competencies that are specifically identified on the transcript or described in the transferring school's catalog.

Only courses with documented comparable content areas and a passing grade with a "C" or better from the transferring institution is accepted for credit. A Comprehensive Subject Examination comparable to the exam taken by students completing the credit on campus may be administered at the discretion of the administration.

#### **Transfer Credit from Previous Industry Experience**

George T. Baker Aviation Technical College may grant credit to a student with aviation maintenance experience obtained prior to initial registration at the school. The student's experience must meet all criteria outlined below for industry experience, and the student must successfully complete a comprehensive subject examination. Industry credit requests will be reviewed by an Industry Credit Review Committee.

To obtain credit for industry experience, the student must document industry experience as follows:

- 1. Documentation must be submitted on company letterhead and signed by a licensed airframe and powerplant mechanic in a management position. The person signing the document must include his/her certificate number.
- Documentation must include training records and state the number of hours the employee performed maintenance related to the subject being requested. If training records are not available, it must be stated in the documentation. The hours performing the related maintenance must meet or exceed four times the hours of the subject requested.
- 3. Experience must meet or exceed all competency requirements for the subject; therefore, documentation must identify the various maintenance tasks or areas of work performed by the employee as it relates to the subject requested. For example, if the class is Landing Gear, the documentation should include maintenance tasks related to brakes, anti-skid, wheel, tires, struts, shimmy dampers, etc. Partial credit will not be awarded.
- 4. Documentation in a foreign language must be submitted with an authenticated translation by an approved agency.
- 5. Documentation must be submitted to the Student Services Administrator 15 days prior to the review by the Industry Credit Review Committee.

#### **Transfer Between Programs**

Students may transfer between programs in any State of Florida Public School and receive credit for documented or demonstrated competencies. Students enrolled in the Aircraft Airframe Mechanic and Aircraft Powerplant Mechanic programs may also receive credit for documented or demonstrated competencies from any school certificated under FAR Part 147 of the Federal Aviation Regulations.

#### **Course Fees**

Fees for adult education classes are established by the School Board of Miami-Dade County in compliance with Florida State Statutes. Students are expected to make full payment at the time of registration. Students are not allowed to attend class until payment has been made. Fees are subject to change without notice. Fees for each course are listed on the class schedule. Students are required to pay for books and supplies as needed.

The school will accept cash, check, or credit card for tuition. Students must have a valid Florida driver's license or valid picture identification. Exceptions must be approved by an administrator.

Tuition for Florida residents is \$2.56 per clock hour. Tuition for Non-Residents is \$10.25 per clock hour. Each new student has a \$15.00 application fee payable at the time of registration. Each trimester all students are charged \$5.00 for a student ID fee.

#### **Material Fees**

Most school supplies are provided to students without cost, however; adult students will be required to pay a materials fee for the following programs/courses:

Fluid Lines and Fitting	\$13.00 per class
Sheetmetal	\$13.00 per class
Composites	\$13.00 per class
Reciprocating Engine Theory & Overhaul	\$13.00 per class
Avionics	\$30.00 per class
Airframe Electrical	\$13.00 per class
Powerplant Electrical	\$13.00 per class

#### Refund, Withdrawal, and Transfer Policy

#### **Avionics**

For all classes beginning within a given trimester:

- a. Before start of a trimester full refund of course and non-resident student fee, no refund of special fees.
- b. Within 14 calendar days after the start of a trimester 50 percent refund of course and non-resident student fee, no refund of special fees.
- c. After 14 calendar days after the start of a trimester no refund of any fees paid.
- d. Students receiving Title IV Federal funds (PELL Grant) should inform the Registrar and the Financial Aid Officer if they are withdrawing from a class or school. When a student withdraws from school, a Return of Title IV Funds form (R2T4) will be completed by the Financial Aid Officer. The student's award will be prorated based on the hours of enrollment.

#### Airframe, General, and Powerplant

- A. If within 50% of the block, the cost of unused class days will be refunded.
- B. Only tuition is refunded. Fees are **NOT** refundable, except for the class material fee.

The student's last day of attendance is determined by the teachers Gradebook.

If the student received a tuition deferment at the time of registration and the student is not awarded a sufficient amount of money to cover the tuition cost deferred, the student is obligated to make payment to the school.

Financial aid students may request a leave of absence prior to withdrawing from school. It is the student's responsibility to request a leave of absence and submit to the Financial Aid Officer. The leave-of-absence forms are available in the Financial Aid Office.

Withdrawal for administrative reasons:

- 1. If the student is withdrawn from the school as a result of administrative action, not involving disciplinary reasons, the student is entitled to a prorated refund.
- 2. If a student is withdrawn from the school as a result of administrative action, involving disciplinary reasons, the student is not entitled to a refund.

Withdrawal because of class closing:

If a class is closed due to low enrollment and the class cannot be combined with a similar class within the school, the student may transfer to a like class in another Miami-Dade County Public School without additional charge. If neither of these options is acceptable, the student's fees will be refunded based on a prorated basis.

#### **Transferring to Classes**

Students transferring to a higher priced class will be required to pay the difference at the time of the transfer. Refunds to students transferring to a lower-priced class are as follows:

- 1. Students are entitled to a refund of the difference if transfer occurs before the trimester begins.
- 2. Students are NOT entitled to a refund if transfer occurs after the beginning of the trimester. If a student has received a refund for a class and wishes to re-enroll, the student's tuition will be charged according to the fee schedule in effect at that time.

#### **STUDENT FINANCIAL AID**

George T. Baker Aviation Technical College offers several programs of financial aid to assist students in meeting their educational expenses. The amount of financial aid a student will receive depends on the financial need. Financial need is the difference between the student's educational expenses and what the family can expect to pay. The amount the family can contribute is derived from the free "Application for Federal Student Aid."

The following Financial Aid programs are available at George T. Baker Aviation Technical College:

#### **Federal Pell Grant Program**

Federally funded grants are awarded to students who demonstrate financial need by the United States Department of Education. The Pell Grant is available to students who enroll in an eligible program and meet all other requirements set by the Department of Education. Applications are available from the Financial Aid Office or through the internet at www.fafsa.ed.gov. The school code is 030798.

#### **Tuition Fee Waiver Program**

In order to qualify for a tuition fee waiver, the student must not be receiving other sources of financial aid from the institution for that trimester. An application must be submitted each term

to the financial aid office and the applicant must be able to provide documentation to verify financial need.

#### **Veteran Educational Benefits Program**

If a student is a veteran of the United States Armed Forces, he/she may be eligible for Veteran Educational benefits. Eligibility is determined by the Department of Veteran's Affairs. The Veteran Certifying Official at the school is available to provide additional information to students and the student may visit the VA website at: <a href="https://www.va.gov">www.va.gov</a>. Students may obtain assistance by calling 305-871-3143, extension 2304.

#### Career Source Florida

This federally funded grant is available to economically disadvantaged students. These funds provide for tuition, books, supplies and a gasoline/bus pass allowance. Students are referred to an intake center where they will complete the necessary applications. This program is coordinated through the Department of Labor and Employment Security

#### **Attendance Procedures**

A key indicator for successful school progress is regular attendance. Students who are tardy and/or absent excessively from the instructional program will not achieve the desired results in vocational or academic achievement.

Adult students absent from class for six consecutive class sessions are automatically withdrawn from the class roll due to unsatisfactory attendance. Students must report to the Registrar's Office before returning to class. Attendance in all programs is calculated in 15 minute intervals.

All students enrolled in the Avionics, Aircraft Airframe Mechanic and/or Aircraft Powerplant Mechanic must be in attendance a minimum of 85% of the instructional time for each class regulated by the Federal Aviation Administration (FAA). Students absent more than 15% of instructional will receive an "F" grade on their transcript for that class.

Federal Financial Aid recipients have specific attendance requirements. The policy is distributed to each student by the Financial Aid Officer.

#### **Veterans Education Benefits- (VA) Students**

Students receiving VA Benefits must be in attendance a minimum of 85% of the instructional time for each class. Students absent more than 15% will receive an "F" grade on their transcript. VA students will have their benefits terminated or reduced if absent more than 15% of their clock hours in their assigned classes depending upon their schedule. VA students must be enrolled in at least 22 hours per week to receive full-time benefits and maintain Satisfactory Academic Progress (SAP) in all assigned classes.

Attendance in the Aircraft Airframe Mechanic, Aircraft Powerplant and Avionics Program is calculated in 15 minute intervals.

In order to show that good cause of unsatisfactory attendance has been removed, students must show good attendance (as defined by school policy) for one calendar month after being terminated for unsatisfactory attendance. After such time, the student may be recertified for VA education benefits.

The student's attendance record will be retained in the veteran's file for USDVA and SAA audit purposes.

#### **Grading Procedures**

Students at George T. Baker Aviation Technical College are awarded a letter grade based on their progress. The determination of the specific grade a student achieves must be based on total classroom participation, shop, homework and projects. The teacher has the professional obligation to grade fairly on all materials on the syllabus. The following grading scale is used to award grades for students:

Post-Secondary / FAA Grade Scale	M-DCPS Grade Scale
A grade of "A" (90 - 100%)	A grade of "A" (90 - 100%)
A grade of "B" (80 - 89%)	A grade of "B" (80 - 89%)
A grade of "C" (70 - 79%)	A grade of "C" (70 - 79%)
A grade of "F" (0 - 69%)	A grade of "D" (60 - 69%)
I - Incomplete	A grade of "F" (0 - 59%)

Academic Progress of students is reviewed each trimester. If a student has unsatisfactory progress in a class or for the trimester he/she is advised of this by the teacher. The student is allowed to retake a course that they have failed when the course is offered. The counselor advises the student of class availability and what may result in class interruption.

#### **Student Records**

All student records are located in the main office. If a student wants to view or have copies of documents in their files, they must provide in writing a signed and dated copy of the request. Also they must state the reason for their request in the statement. The request will be honored within 48 - 72 hours.

#### STANDARDS OF CONDUCT

A good learning environment provides order and discipline as evidenced by the absence of distractions, friction, and disturbances which interfere with the effective functioning of the student, the class, and the school. It is also the presence of a safe, friendly, yet businesslike atmosphere in which students and school personnel work cooperatively toward mutually recognized and accepted goals.

When it is determined that a student is in violation of the Student Code of Conduct, appropriate action will be taken. Depending on the violation, a student may be assigned work duty, placed on outdoor suspension, or recommended for expulsion. It is the school policy to assist those students who need help in adjusting to an environment that is sensitive to others and promotes learning.

The Miami-Dade Public County Schools Student Code of Conduct applies to all students. Students are expected to:

- 1. Attend all scheduled classes and be on time
- 2. Come to class with appropriate materials
- 3. Be respectful to all individuals and of property
- 4. Refrain from profane or disruptive statements
- 5. Conduct yourself in a safe and responsible manner
- 6. Be well-groomed and appropriately and professionally dressed
- 7. Be responsible for your own work
- 8. Abide by the rules and regulations set forth by the school and individual classroom teacher
- 9. Seek changes in an orderly and approved manner

#### **Student Grievance Procedures**

Students are encouraged to review the Student Handbook and the Student Code of Conduct. When students have questions about procedures, decisions, or judgments, they are encouraged to discuss the situation with their classroom instructor. The Counselor is available for further

discussion and resolution of differences. Students may formally file a grievance using the School Board approved Student/Parent Complaint Form. This form is housed in the Student Service Department.

The Grievance policy at George T. Baker Aviation Technical College is:

Students having questions about procedure, decision, or judgment are encouraged to discuss the situation with their classroom teacher. The counselor is available for further discussion and resolution of differences. Students may formally appeal the process with a school-site administrator.

Students also have recourse to a more formal appeal process with a school site administrator and region office. Students may also contact the accrediting agency:

Dr. Gary Puckett
Executive Director/President
Accrediting Commission
Council on Occupational Education

7840 Roswell Road Building 300, Suite 325 Atlanta, Georgia 30350

770/396-3898

WATS 800-917-2081 FAX 770/396-3790

WWW Site: www.council.org E-Mail Address: puckettg@council.org

#### STUDENT SUPPORT SERVICES

#### **Counseling Services**

A counselor/advisor is available to assist current, prospective, and former students with vocational, educational, and personal counseling services. The counselor is available Monday-Friday, and the hours are adjusted to assist students in both day and evening programs. Specific hours are posted. Students may contact the counselor by calling (305) 871-3143.

#### **Placement Services**

A career specialist is available to assist currently enrolled students and graduates with job placement. Students are encouraged to contact the Placement Office when they complete a program and desire employment. Students may also schedule an appointment by calling (305) 871-3143.

#### **Student Transcripts**

Students must request an official transcript by completing the appropriate form located at the treasurer's office and paying the necessary fee of \$5. Official transcript will be mailed to the school/agency. Students will receive a student copy. Students are provided an unofficial transcript at the time of registration each trimester. Additionally, students may request an unofficial transcript at any time from the counselor, advisor, placement specialist, or administrator.

#### **Bookstore**

The student bookstore is located in Room 128 and offers books and materials for use in the classes taught at George T. Baker Aviation Technical College. The bookstore does not accept checks.

#### **Bus Information**

Metropolitan Transit Agency (MTA) serves the George T. Baker Aviation Technical College. Detailed information can be obtained by calling the MTA information office or visit <a href="http://www.miami-dade.gov">http://www.miami-dade.gov</a> for transit schedule.

#### **Housing Facilities**

The school does not have dormitories or rooms available to house students; however, there are efficiencies and motels available in the area. Out-of-town students must make their own

arrangements for accommodations.

#### **Media Center**

The Media Center of George T. Baker Aviation Technical College has a large collection of audiovisual materials and reference books related to the vocational programs offered at the school. Reference books and periodicals are available for currently enrolled students.

#### **Graduation Procedures**

Students successfully completing all courses, hours, and test requirements as specified by George T. Baker Aviation Technical College, Miami-Dade County Public Schools, the State of Florida Department of Education, and/or the Federal Aviation Administration may submit an application for graduation. All fees and other obligations must be paid before a certificate/diploma is issued.

#### **Industry Training**

George T. Baker Aviation Technical College welcomes the opportunity to provide industry training programs whenever the need arises. Industry training is designed to meet a need that may be extracted from an approved curriculum or request for training for which a curriculum has not been prepared.

#### **Student Health Care**

The school has no facilities or personnel to render medical assistance. If a student has a medical problem which might result in an emergency situation, the instructor and Student Services Department should be notified when the student initially enrolls in the school. First aid kits are available throughout the school.

#### Insurance

Student accident insurance is available to all students registered in classes at George T. Baker Aviation Technical College. This insurance must be purchased directly from the insurance company by the student. The forms for the insurance coverage are available in the Student Services Department or online at <a href="http://www.k12studentinsurance.com">http://www.k12studentinsurance.com</a>

#### Student Identification Card

Student I.D. cards must be worn by all students. There is a minimum fee. Lost cards should be reported to the Registration Office immediately. There is a charge for replacement. In the event a student is suspended, expelled, or withdrawn from a class, the I.D. card must be returned to the Registration Office. Students must wear their valid I.D. when requesting any of the services

offered by student services or the media center.

#### STUDENT SAFETY RESPONSIBILITIES

The student bears a responsibility for his/her own safety. The program of safety education should be such that the students realize that it is his/her duty and responsibility to cooperate, develop, and practice sound safety habits.

Students should observe the following safety procedures:

- 1. All persons observing or working in the shop areas where power-driven equipment is used must wear proper eye and ear protection.
- 2. Safety glasses must be of the approved type with shatter proof lens. Approved safety glasses may be purchased at the Bookstore.
- 3. Closed leather shoes are required in the shop and ramp service areas.
- 4. When working around machinery with moving parts, persons with long hair are required to have their hair properly secured to reduce the danger of the hair getting caught in the moving parts of the machines.
- 5. Students working around machinery and test equipment with moving parts and electrical power applied should remove finger rings, watches, neckties, etc. Loose clothes should not be worn.
- 6. Students must wear approved and appropriate masks and gloves while working with hazardous materials.
- 7. Students working around high noise areas must wear ear protection.
- 8. Students must follow all safety guidelines and instructions outlined in the safety procedures for that course.
- 9. Students must demonstrate their understanding of the safety guidelines/instructions outlined in the "block safety procedures" by completing a safety test with a score of 100%.

#### FEDERAL AVIATION ADMINISTRATION LICENSE EXAMINATION

### **Obtaining an FAA Certificate**

Students enrolled in the Aircraft Powerplant Mechanic or Aircraft Airframe Mechanic programs must complete the items listed below to obtain the FAA certificate:

- Complete all requirements for the program including hours, projects, competencies, Test for Adult Basic Education (TABE).
- 2. Submit an application for graduation.
- 3. Pass the School Qualifying Examination.
- 4. Pass all classroom FAA Practical Projects.
- 5. Pass the FAA Written Examinations.
- 6. Pass the FAA Oral Examination.

George T. Baker Aviation Technical College is fully certificated and authorized to administer the FAA written, oral, and practical FAA Aircraft Mechanics Examinations. There cost of the FAA Written Exams is \$125.00 for each exam. The cost of each section of the FAA Oral & Practical Examinations is \$150.00. The school is authorized to administer the FCC license exam for Electronic Technicians. The cost of the FCC exam is \$50.00 for each exam. The school offers the exams only to students completing a program at George T. Baker Aviation Technical College.

#### **Articulation Agreement with Colleges**

Most colleges offering an aviation degree provide articulation opportunities. Credits are awarded by colleges and universities offering Associate of Science or Bachelor's degrees. The requirements are the successful completion of:

- 1. The Aircraft Airframe Mechanic and Aircraft Powerplant Mechanic programs
- 2. The Federal Aviation Administration Examinations

Miami-Dade College participates in the articulation agreement with George T. Baker Aviation Technical College and offers 45 credits toward an A.S. degree in Aviation Management. The college also offers credit to students completing the Electronic Technology or Avionics programs.

Broward College and George T. Baker Aviation Technical College also participated in an articulation agreement with Broward College which offers 60 credits towards an A.S. degree in Aviation Management. The college also offers credit to students who complete the Electronic Technology or Avionics program.

#### STUDENT ACTIVITIES

SkillsUSA provides leadership opportunities as an integral part of the Industrial Education programs. All students enrolled in the Aviation Mechanic, Electronic Technology and Avionics programs are strongly encouraged to join SkillsUSA and participate in activities that bring recognition to themselves and the school.

Technology Students Association (TSA) is a national non-profit organization with a strong interest in the advancement of technology in schools.

National Technical Honor Society (NTHS) is the leader in the recognition of outstanding student achievement in career and technical education. The NTHS encourages higher scholastic achievement for today's highly competitive workplace.

CyberPatriot is the National Youth Cyber Education Program. There are three main programs within CyberPatriot: the National Youth Cyber Defense Competition, AFA CyberCamps and the Elementary School Cyber Education Initiative. CyberPatriot was conceived by the Air Force Association (AFA) to inspire high school students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future.

#### AIRCRAFT AIRFRAME MECHANIC AND AIRCRAFT POWERPLANT MECHANIC PROGRAMS

The Aircraft Mechanic programs prepare students for employment as an aircraft mechanic. Students who complete the Airframe Mechanic and/or Powerplant Mechanic program(s) are eligible to take the Federal Aviation Administration (FAA) written and the oral and practical examination to become a certificated Airframe Mechanic or Powerplant Mechanic.

The General curriculum is a one-year prerequisite for both the Aircraft Airframe Mechanic and/or Aircraft Powerplant Mechanic Program. The school is certificated by the FAA under

#### Certificate #CT9T072R.

Students should complete either the 1440 hour Aircraft Airframe Mechanic or Aircraft Powerplant Mechanic program as a full time student in approximately 1 ¾ years attending 25 hours per week, five days a week. As a part time student attending 12.5 hours per week, five days a week, the 1440 hour program should be completed in 3 ½ years. Students should complete both the Aircraft Airframe Mechanic or Aircraft Powerplant Mechanic program full time, 25 hours per week five days a week in 2 ½ years. Students attending part time 12.5 hours a week, five days a week should be able to complete the programs in 5 years.

#### Aircraft Airframe Mechanic Program - 1440 Clock Hours

The goal of the Airframe Mechanic Program is to prepare students to pass the Federal Aviation Administration tests, and thereby become licensed Airframe Mechanics, and be placed in aviation related jobs.

Students are taught the basic knowledge, theories and skills necessary to perform such functions as the proper application of safety rules, the correct use and care of tools and equipment, Federal Aviation Administration rules and regulation, and the interpretation of manufacturer's maintenance manuals. The student develops the ability to work with others and display proper attitudes in the role of a useful and productive citizen in the community. The program is a combination of theory/lab and shop classes. It is approximately a 50/50 split between theory/lab and shop within the curriculum.

#### General

Mathematics
Weight and Balance
Maintenance Records and Regulations
Non-Destructive Testing
Materials and Processes
Aircraft Drawing
Ground Handling
Basic Electricity
Physics
Fluid Lines and Fittings
Cleaning and Corrosion Control
Employability Skills

#### **Airframe Mechanic**

Flight Theory
Assembly and Rigging
Wood, Fabric and Finishes
Aircraft Inspection
Sheetmetal
Composites
Welding
Hydraulics and Pneumatics
Landing Gear
Communication and Navigation
Fire Protection and Fuel Systems
Instrument Systems
Airframe Electrical

- Position and Warning
- Cabin Atmosphere
- Ice and Rain Removal

#### Aircraft Powerplant Mechanic Program - 1440 Clock Hours

The goals of the Aircraft Powerplant Mechanic Program, are the preparation of students to undertake and pass the Federal Aviation Administration Test, become licensed Powerplant Mechanics, and be placed in aviation related jobs.

The students are taught the basic knowledge, theories, and skills necessary to perform functions such as the proper application of safety rules, the correct use and care of tools and equipment, Federal Aviation Administration rules and regulations, and the interpretation of manufacturer's maintenance manuals. Students develop the ability to work with others and display proper attitudes in the role of a useful and productive citizen in the community. It is approximately a 50/50 split between theory/lab and shop within the curriculum.

#### General

Mathematics
Weight and Balance
Maintenance Forms and Regulations
Non-Destructive Testing
Materials and Processes
Aircraft Drawing
Ground Handling
Basic Electricity
Physics
Fluid Lines and Fittings
Cleaning and Corrosion Control
Employability Skills

#### **Powerplant**

Reciprocating Powerplant Theory Reciprocating Powerplant Overhaul **Turbine Powerplant Theory Turbine Powerplant Overhaul** Powerplant Removal and Installation Powerplant Instrument and Fire Protection Powerplant Inspection **Ignition Systems Fuel and Metering Systems Lubrication Systems Powerplant Electrical** Powerplant Instruments Propellers Powerplant Cooling, Induction, Exhaust Systems Powerplant Operation, Troubleshooting, and Repair

#### **Avionics Program - 2120 Clock Hours**

The Avionics Technician Program prepares students for entry-level positions in avionics and develops academic, technical, and professional skills required for job acquisition, retention, and advancement. The curriculum includes a combination of electronics and avionics technology theory and practical applications necessary for successful employment. Program graduates

receive an Electronic Technology and Avionics Technician program completion certificates.

Students should complete the 2120 Avionics program as a full time student attending 25 hours a week five days a week in 2 years. As a part time student attending 12.5 hours a week, five days a week should complete the program in 4 years. It is approximately a 50/50 split between theory/lab and shop within the curriculum.

#### Subjects

Soldering and Basic Laboratory Practices

Employability Skills
Entrepreneurial Skills
Direct Current Circuits
Basic Computer Usage
Alternating Current Circuits

Solid State Devices
Digital Circuits
Microprocessors
Analog Circuits
Technical Recording
Communications Skills

Math Skills Basic Science

**Navigation Systems** 

Radio Repair Stations
Aircraft Electrical Systems
Installing Avionics Systems
Calibration of Test Equipment
AM and FM Transmitter

AM and FM Transmitter
AM and FM Receiver
AM and FM Transceiver

Electromagnetic Wave Emissions Line and Bench Maintenance Line and Bench Maintenance of

Airborne Radar Systems
Operation of Area Navigation

**Systems** 

Line & Bench Maintenance of Radio

## **Course Description**

#### **General Curriculum - 510 Clock Hours**

**Mathematics** (**60 hours**) This subject area is the study of the theory and practical application of mathematics. The student will solve mathematical problems consisting of volume, area, ratio, percentage, and extract roots. They also perform algebraic operations involving algebraic addition, subtraction, multiplication, and division of positive and negative numbers.

**Weight and Balance (30 hours)** This subject area is the study of the theory and practical application of aircraft weight and balance. Topics include weighting an aircraft, calculating the center of gravity, and revising the weight and balance after equipment changes.

Maintenance Records and Regulations (60 hours) This subject area is the study of the theory

and practical application of maintenance forms and records, maintenance publications, and mechanic privileges and limitations. The topics include recording logbook entries for minor repair, major repair, inspection, Airworthiness Directive compliance, and Service Bulletin compliance, obtaining information from Type Certificate Data Sheets (TCDS), listing information from a Supplemental Type Certificate (STC), identifying selected Federal Aviation Regulations, determining the applicability of Airworthiness Directives, and demonstrating the use of Advisory Circulars, using aircraft manuals and publications to locate maintenance information, researching the requirements to qualify for an Airframe Mechanic and/or Powerplant Mechanic certificate, and determining the privileges of an Airframe Mechanic and Powerplant Mechanic.

**Non-Destructive Testing (30 hours)** This subject area is the study of the theory and practical application of non-destructive testing. The topics include performing visual, dye penetrant, magnetic particle, eddy current, and ultrasonic non-destructive testing. Emphasis will be placed on inspecting welds on selected materials and making precision measurements using a micrometer.

**Material and Processes (60 hours)** This subject area is the study of the theory and practical application of tools, materials and processes used on the aircraft. The topics include demonstrating proper use of a ruler, selecting and using a torque wrench, performing safety wiring, identifying aircraft hardware, explaining metal numbering system, and determining proper heating treatment methods.

**Aircraft Drawing (30 hours)** This subject area is the study of the theory and practical application of aircraft drawing. The topics include identifying symbols to interpret diagram information, interpreting dimensions and tolerances using drawings, making a sketch of repairs/alterations made to an aircraft, and locating specific data using graphs and charts.

**Ground Handling (30 hours)** This subject area is the study of the theory and practical application of aircraft ground handling. The student will tie down an aircraft, determine aircraft fuel quantity, prepare an aircraft for towing, and start and ground operate an aircraft.

**Basic Electricity (80 hours)** This subject area is the study of the theory and practical application of basic electricity. The student will determine resistor value by using color code, identify electrical symbols, calculate voltage drop, demonstrate the use of test equipment, and troubleshoot an electrical fault.

**Physics (40 hours)** This subject area is the study of the theory and practical application of physics. The student will calculate force, pressure, and area problems; determine the effects of temperature on aircraft performance and mechanical advantage of pulleys and gear; and explain Bernoulle's principal as applied to wing aerodynamics.

**Fluid Lines and Fittings (30 hours)** This subject area is the study of the theory and practical application of the aircraft fluid line and fittings. The student will bend tubing to specifications; form a bead on tubing, identify tubing defects, and fabricate, test, and install a hose and a line.

**Corrosion Control (30 hours)** This subject area is the study of the theory and practical application of corrosion control. The student will identify different types of corrosion, demonstrate corrosion removal, and perform corrosion prevention treatment.

**Employability Skills (30 hours)** This subject area is the study of the practical applications of obtaining employment. Topics include securing information about aviation employment opportunities, formulating a letter of introduction, completing an employment application, preparing a resume, completing a letter of resignation, participating in a job interview, and preparing a portfolio.

## **Course Description**

#### Aircraft Airframe Mechanic Program - 930 Clock Hours

**Flight Theory (20 hours)** This subject area is the study of the theory and practical application of the theory of flight. The student will be able to explain the factors that affect lift, the aerodynamic laws of physics, how lift occurs over an airfoil, list and explain types of drag, explain the difference between symmetrical and asymmetrical airfoils, and define and demonstrate Bernoulli's principle and Newton's third law.

Assembly and Rigging (100 hours) This subject area is the study of the theory and practical application of the flight control assembly and rigging for fixed wing and rotary wing aircraft. The student will fabricate a control cable, jack an aircraft, inspect, balance, and rig primary and secondary control surfaces, demonstrate the use of a tension correction temperature conversion chart, and use proper tools and equipment to assemble the components of a cable and rod operated flight control system.

**Wood, Fabric and Finishes (60 hours)** This subject area is the study of the theory and practical application of aircraft wood structures, aircraft fabric covering and aircraft finishes. The student will identify woods used for structures, identify wood defects, and repair wood structures. The students will inspect, test, and repair fabric and fiberglass, and demonstrate the technique used to test fabric and fiberglass for strength. The student will identify and apply aircraft finishing materials, determine proper location of aircraft registration markings, inspect aircraft finishes and demonstrate methods to correct defects, and identify parts and proper care of spray equipment.

**Aircraft Inspection (60 hours)** This subject area is the study of the theory and practical application of aircraft inspections. The student will perform an airframe conformity and airworthiness inspection, complete a 100-hour inspection and make proper maintenance record entries, and determine maintenance procedures required to return the aircraft to service.

**Sheetmetal (120 hours)** This subject area is the study of the theory and practical application of the aircraft sheetmetal structures and how they are fabricated. The student will form, layout, bend, and rivet sheetmetal structures; select, install, and remove special sheetmetal fasteners; use drawings, bend allowance formulas, and required tools to layout and fabricate a specified project; and inspect, check, service, and repair doors, windows, and interior furnishings.

**Composites (90 hours)** This subject area is the study of the theory and practical application of composite materials used in aircraft structures and repairs. The student will inspect, test and repair fiberglass, honeycomb, composite, and primary and secondary structures; install and remove fasteners in composite material; and repair plastics; and perform window repairs.

**Welding (30 hours)** This subject area is the study of the theory and practical application of welding aircraft structures. The student will demonstrate metal cleaning methods, select appropriate welding equipment, setup welding equipment, demonstrate a butt weld, and select the correct repair method for the repair of a tubular structure.

**Hydraulics and Pneumatics (60 hours)** This subject area is the study of the theory and practical application of the hydraulic and pneumatic power supply systems and components. The student will identify hydraulic fluids, perform hydraulic and pneumatic power systems components inspections, service, troubleshoot, and repair components.

**Landing Gear (60 hours)** This subject area is the study of the theory and practical application of the landing gear systems, shock struts, brakes, wheels, tires, and nose wheel steering systems. The student will perform a landing gear retraction test, check landing gear alignment, service a strut, overhaul a brake master cylinder, service a nose gear steering system, and inspect and assemble a wheel assembly.

**Communication and Navigation (40 hours)** This subject area is the study of the theory and practical application of the communications and navigation systems, autopilot, approach and coupling systems, radar beacon transponders, flight management computers, antennas, emergency locator system (ELT), and ground proximity warning systems (GPWS). The student will identify antenna types, inspect antenna installations, check and service ELT batteries, and inspect and installed communication and navigation equipment.

**Fire Protection and Fuel Systems (50 hours)** This subject area is the study of the theory and practical application of fire extinguisher, fire, smoke, carbon monoxide detection systems,

aircraft fuel systems, fuel quantity indicating systems, fuel pressure and temperature warning systems. The student will inspect a bi-metallic thermal fire/overheat warning switches, check a thermocouple fire detector, troubleshoot a continuous loop fire/overheat detector, inspect smoke detectors, check carbon monoxide detectors, and inspect and installed fire extinguisher agent containers and associated plumbing. The student will inspect integral, bladder, and metal fuel tanks; troubleshoot a fuel pressure warning system; service a fuel strainer; remove and inspect fuel boost pump; and inspect and repair a fluid quantity indicating system.

**Instrument Systems (30 hours)** This subject area is the study of the theory and practical application of heading, speed, altitude, temperature and pressure; position indicating and onboard test equipment, and directional position indicating instrument systems. The student will perform a pitot static check; determine correct instrument range markings; service vacuum system filter; swing a magnetic compass; remove, inspect, and reinstall cockpit instruments, mechanical and electrical heading, speed, altitude, temperature, pressure, and position indicating systems to include the use of built-in test equipment. Install instruments and perform a static pressure system leak test.

Airframe Electrical Systems (90 hours) This subject area is the study of the theory and practical application of electrical systems and components. The student will perform electrical system operational checks and use prescribed test equipment to locate system faults. Demonstrate the use of a growler and proper test equipment to measure generator output. The student will demonstrate the how to use a wire load chart, select and install switches, circuit breakers, terminals, connectors, and wiring. Check and service landing lights, anti-collision lights, and navigation lights.

**Position and Warning (30 hours)** This subject area is the study of the theory and practical application of the speed, landing gear and flight control position and warning systems. The student will troubleshoot a landing gear position and warning system, check an ant-skid system, inspect stall and airspeed warning systems.

**Cabin Atmosphere (60 hours)** This subject area is the study of the theory and practical application of pressurization, oxygen systems, combustion heaters, air cycle, and vapor cycle air conditioning systems. The student will inspect components of a vapor cycle air conditioning system, troubleshoot an air cycle air conditioning system, repair a combustion heater system, perform oxygen system repairs, inspect the outflow valve, and remove, inspect, and reinstall pressurization system components.

**Ice and Rain Removal (30 hours)** This subject area is the study of the theory and practical application of de-ice, anti-ice, and rain control systems. Students will check a thermal anti-icing system, inspect a heated windshield, troubleshoot a pitot heater system, service a windshield rain clearing system, and determine the proper operation of a de-ice system.

## **Course Description**

#### Aircraft Powerplant Mechanic Program - 930 Clock Hours

**Reciprocating Engine Theory (60 hours)** This subject area is the study of the theory and practical application of reciprocating engine operation. The student will be able to identify engine types, list the events of the Otto cycle, compute cubic inch displacement and compression ratio, determine valve overlap, cylinder position, calculate indicated horsepower, and brake horsepower.

**Reciprocating Engine Overhaul (120 hours)** This subject area is the study of the theory and practical application of reciprocating engine overhaul. The student will service and check an engine in accordance with the manufacturer's specifications and determine its condition; disassemble, inspect, clean, measure, and repair a reciprocating engine, reassemble a reciprocating engine to manufactures specifications and complete a test run.

**Turbine Engine Theory (60 hours)** This subject area is the study of the theory and practical application of turbine engine operation. The student will be able to explain the operation of a turbine engine, list the elements of the Brayton cycle, explain the difference between the types of turbine engines, identify the sections of a turbine engine, compute the thrust output of a turbine engine, and check a turbine driven auxiliary power unit.

**Turbine Engine Overhaul (60 hours)** This subject area is the study of the theory and practical application of the overhaul of a turbine engine. The student will disassemble, clean, inspect, and repair a turbine engine; reassemble the engine maintaining the required tolerance; and check the engine in accordance with manufacturer's specifications.

**Engine Removal and Installation (60 hours)** This subject area is the study of the theory and practical application of engine removal and installation. The student will remove an engine from an aircraft, prepare an engine for installation, install an engine, inspect engine mounts, rig engine controls, perform an engine operational check, and make necessary log book entries after an engine change.

**Troubleshooting (60 hours)** This subject area is the study of the theory and practical application of engine operation, troubleshooting, and repair. The student will check, troubleshoot, and repair a turbine engine, check compression, set idle mixture, make a cold cylinder check, measure crankshaft run-out on a reciprocating engine; perform an operational check of an engine; and check propeller for proper tracking.

**Engine Inspection (60 hours)** This subject area is the study of the theory and practical application of engine inspections. The student will perform powerplant conformity and airworthiness inspections, prepare an inspection checklist, perform an inspection, prepare an inspection report

for a reciprocating and turbine engine, inspect an engine for sudden stoppage, inspect a propeller, and make proper log book entries.

**Ignition Systems (60 hours)** This subject area is the study of the theory and practical application of reciprocating and turbine ignition systems and components. The student will overhaul a magneto, check ignition leads, install and time a magneto, determine the correct spark plugs for an engine, remove, clean, and reinstall a set of spark plugs, and check a turbine ignition system.

**Fuel and Metering Systems (90 hours)** This subject area is the study of the theory and practical application of reciprocating and turbine engine fuel systems and components. The student will overhaul a carburetor, install a carburetor, adjust carburetor idle speed and mixture, inspect a turbine engine fuel system and fuel control for security and leaks, and rig a turbine engine fuel control.

**Lubrication Systems (30 hours)** This subject area is the study of the theory and practical application of engine lubrication systems. The student will troubleshoot, repair, drain, and service an oil system; disassemble, clean, inspect, and reassemble an oil pump; inspect an oil screen, replace an oil filter, and adjust an oil pressure relief valve.

**Engine Electrical (90 hours)** This subject area is the study of the theory and practical application of engine electrical systems. The student will perform electrical load analysis; select correct circuit protectors, select proper size wire for a given electrical circuit; fabricate a wire bundle, secure a wire bundle, overhaul an electrical starter; remove, inspect, and reinstall an engine driven generator/alternator; and inspect, service, troubleshoot, and repair turbine engine starter systems.

**Engine Instruments (30 hours)** This subject area is the study of the theory and practical application of engine instruments. The student will convert the percent of revolutions per minute to revolutions per minute, check thermocouple leads values, check instrument range markings, remove and reinstall engine instruments, troubleshoot a rate of flow indicating system, and check a manifold pressure gauge for correct static pressure.

**Propellers (60 hours)** This subject area is the study of the theory and practical application of propellers. The student will demonstrate the use of a protractor, inspect a propeller, repair propeller damage, lubricate a propeller, balance a propeller, remove, service, install, and adjust a propeller governor, and perform an operational check on a constant speed propeller.

**Engine Cooling, Induction, and Exhaust Systems (60 hours)** This subject area is the study of the theory and practical application of engine cooling systems, induction systems, exhaust systems and thrust reverser systems. The student will troubleshoot engine cooling systems, check engine cowl flap operation, inspect cylinder baffles, and troubleshoot engine cooling system malfunctions and determine corrective action. The student will service an induction filter, inspect an induction manifold, explain the operation of supercharger systems, inspect heat exchangers, superchargers, and turbine engine airflow and temperature control systems, and run engine and

check carburetor heat. The student will inspect, check, troubleshoot, service, and repair an exhaust system, inspect exhaust cones for defects and check a thrust reverser for proper operation.

**Fire Protection (30 hours)** The student will inspect, check, service, troubleshoot, and repair an engine fire detection system, check proper pressure, correct hydrostatic inspection date, and installation security of an on-board fire extinguisher bottle.

## **Course Description**

#### **Avionics Program - 2120 Hours**

**Soldering and Basic Laboratory Practices (75 hours)** This block of instruction is a study of the basic skills associated with safety in all areas of electronics, laboratory practices, tool usage, and soldering techniques.

**Employability Skills (25 hours)** This block of instruction is a study of employment search techniques, resume writing, interviewing skills, work ethics and follow up procedures.

**Entrepreneurial Skills (25 hours)** This block of instruction is a study of the basic concepts for starting and operating a small business. Areas included are licensing a business, identifying start up capitol, preparing a business plan, employee relations, and business management.

**Direct Current Circuits (125 hours)** This block of instruction is a study of the theory of Direct Current (DC) Circuits and participation in laboratory experiments using DC Circuits.

**Basic Computer Usage (80 hours)** This block of instruction is the study of basic concepts of the microcomputers including the operating system and software programs such as word processing, database, programming language, and spreadsheets.

**Alternating Current Circuits (220 hours)** This block of instruction is the study of the theory and application of Alternation Current (AC) in electronic circuits. The laboratory projects demonstrate the operation of AC circuits.

**Solid State Devices (100 hours)** This block of instruction is the study of the theory of solid-state electronic devices used in modern day electronic circuits. The laboratory projects require developing and testing various circuits.

**Digital Circuits (190 hours)** This block of instruction is the study of digital circuits, which is the present technology used in pulse circuits and in the operation of the computer. The laboratory requires developing and testing various circuits.

**Microprocessors** (185 hours) This block of instruction is the study of digital circuits used in industrial and consumer equipment and microprocessors. Areas of focus include microcomputers, and industrial micro controllers used in dedicated computer applications.

**Analog Circuits (375 hours)** This block of instruction, will apply to the skills acquired in the preceding areas of study to Analog Circuits. Laboratory projects require building circuits used in common electronic equipment, analyzing and testing circuits, and developing the skills to correct problems.

**Radio Repair Stations (30 hours)** This block of instruction is the study of FAA regulations that set the standards and operation procedures to be followed when establishing a business that will be involved in the repair of aircraft electronics or electrical equipment.

**Aircraft Electrical Systems (100 hours)** This block of instruction is the study of the design, operation, troubleshooting, and repair of the aircraft electrical systems.

**Line and Bench Maintenance (100 hours)** This block of instruction is the study of the techniques used in the basic operation, troubleshooting, and repair of aircraft communication and navigation electronic equipment.

**Installing Avionics Systems (40 hours)** This block of instruction is the study of basic aircraft structures as related to the location and mounting of the electronic equipment used in aircraft. The student will study the fabrication of interconnect cables, connectors and hardware. Federal Aviation Administration (FAA) regulations, weight and balance, and installation of antennas are also part of this block of instruction.

**Calibration of Test Equipment (40 hours)** This block of instruction is the study of the testing and calibration of the test equipment used in the repair and certification of the electronic equipment used in aviation.

**AM & FM Transmitter (45 hours)** This block consists of instruction in the study of theory, operation, troubleshooting, and repair of basic types of radio transmitters used in communication and navigation equipment installed on aircraft.

**AM & FM Receiver (45 hours)** This block consists of instruction in the study of theory, operation, troubleshooting, and repair of basic types of radio receivers used in communication and navigation equipment installed on aircraft.

**AM & FM Transceiver (45 hours)** This block consists of instruction in the study of theory, operation, troubleshooting, and repair of basic types of radio transceivers used in communication and navigation equipment installed on aircraft

**Electromagnetic Wave Emissions (45 hours)** This block of instruction is the study of the theory and operation of antennas and the transmission of electromagnetic waves in the atmosphere.

**Line and Bench Maintenance of Radio Navigation Systems (60 hours)** This block of instruction is the study of the techniques used in the basic operation, troubleshooting, and repair of aircraft radio communication, navigation, electronic systems and equipment.

**Line and Bench Maintenance of Radar Systems (60 hours)** This block of instruction is the study of the techniques used in the basic operation, troubleshooting, and repair of aircraft weather radar, global positioning systems, and active radar tracking systems used in aviation. **Operation of Area Navigation Systems (60 hours)** This block of instruction is the study of the theory and operation of area navigation systems, very high frequency omni range direction finders, distance measuring equipment and global positioning systems.

#### **APPENDIX**

#### **ADMINISTRATION**

MANTILLA, RENÉ, Principal; B.S. Florida International University; M.S. Nova Southeastern University

SANDS, GEORGE W., Assistant Principal; B.S. Michigan State University; M.S. Management, St. Thomas University

SAINT-PHARD, JEAN, Assistant Principal; B.A. Florida International University; M.A. Florida International University

YOUNG, MOLLY, Business Manager.

DIAZ-DUQUE, ROSY, B.A. Sacred Hearted University, M.S. Nova Southeastern University

#### SUPPORT STAFF

MCEVOY, CLAUDIA, Financial Aid Specialist/VA Certifying Official; B. A. Business Education, Florida International University; M.S. Business Education, Florida International University, and Ed.S. Administration and Supervision, Nova Southeastern University.

PEMBLE, TODD D., Media Specialist; B. A., State University of New York; M.A., Central Michigan University; Education Media Specialist Certification, Nova University.

GARCIA, VIVIAN, Counselor; B.A. Physical Education, Florida International University; M.S. Counselor Education, Florida International University, Certificate in Educational Leadership., Florida International University.

#### **FACULTY**

CARTER, HOWARD, JR., Electronic Technology; B. S., Florida A&M University.

DELAROSA, SERGIO, Aviation Maintenance Technician.

FERNANDEZ, REYNALDO, Aviation Maintenance Technician; B.A., University of Miami.

FLORES, ALBERTO, A.S. Miami-Dade College

FLORES, RICK, Aviation Maintenance Technician

HERNANDEZ, ELEUTERIO, Aviation Maintenance Technician; B.S.Equivalency, Florida International University.

HERON, PATRICK, Aviation Maintenance Technician; B.S. Equivalency, Florida International University.

HOWARD, JAMES, Aviation Maintenance Technician.

KING, EUGENE, Aviation Maintenance Technician; A.S. Community College of the Air Force; B.S. Southern Illinois University, M.S. Trinity University.

MCDANIEL, DARREN, B.S. in Finance; FIU, M.S. Finance; Embry Riddle

MUNOZ, ALAN, Aviation Maintenance Technician.

NEWELL, MARK, Aviation Maintenance Technician; B.S. Equivalency, Florida International University.

NIJBORG-GARCIA, NILDA D., Aviation Maintenance Technician; A.S. in Aviation Maintenance Management, Broward Community College; B.S. Equivalency, Florida International University.

PEREZ, ANGEL, Placement Specialist and Aviation Maintenance Technician; A.S., Academy of Aeronautics.

REYES, LUIS, M.A.S., Embry Riddle Universityl; B.S., Aeronautics, Embry Riddle University; Aviation Maintenance Technician.

ROBINETTE, STEVEN, Aviation Maintenance Technician.

ROSA, JAMES, Aviation Maintenance Technician.

SALCEDO, DANIEL R., Aviation Maintenance Technician; A.S., Danielson, CT.; B.S. Equivalency, Florida International University; M.S., Nova Southeastern University.

SALCEDO JR., DANIEL, Aviation Maintenance Technician

SMITH, CHARLES. Aviation Maintenance Technician

SOSA, FRANK, Aviation Maintenance Technician

STEVENS, JOHN, Aviation Maintenance Technician; A.S., College of Aeronautics; B.S. Equivalency, Florida International University.

TARTAGLIA, GUISEPPE, Aviation Maintenance Technician

TSCHUMY, ROBERT, Aerospace Technology; A.S., Community College of the Air Force; B. S. Nova University.

WILLIAMS, LARRY, B.S. Journalism, Florida International University, Aviation Maintenance Technician.

#### MIAMI-DADE COUNTY SCHOOL BOARD NON-DISCRIMINATION POLICY

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in employment and educational programs/activities and programs/activities receiving Federal financial assistance from the Department of Education, and strives affirmatively to provide equal opportunity for all as required by:

**Title VI of the Civil Rights Act of 1964 -** prohibits discrimination on the basis of race, color, religion, or national origin.

**Title VII of the Civil Rights Act of 1964**, as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or natural origin.

Title IX of the Education Amendments of 1972 - prohibits discrimination on the basis of gender.

**Age Discrimination in Employment Act of 1967 (ADEA),** as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

**The Equal Pay Act of 1963**, as amended - prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of The Rehabilitation Act of 1973 – prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

**The Pregnancy Discrimination Act of 1978 -** prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

**Florida Education Equity Act (FEEA)** - prohibits discrimination on the basis of race, gender, national origin, marital status or handicap against a student or employee.

**Florida Civil Rights Act of 1992** - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

**School Board Rules 6Gx13- 4A-1, 01, 6Gx13- 4A-1.32, and 6Gx13- 5D-1.10** prohibit harassment and/or discrimination against a student or an employee on the basis of gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference, or disability.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which also stipulates categorical preferences for employment.