

TECHNOLOGICAL UNIVERSITY OF PANAMA

OFFICE OF THE REGISTRAR

COLLEGE OF MECHANICAL ENGINEERING

**FLIGHT DISPATCHER- TECHNICIAN
COURSE CAREER DESCRIPTION**

2018

**TECHNOLOGICAL UNIVERSITY OF PANAMA
OFFICE OF THE REGISTRAR
COLLEGE OF MECHANICAL ENGINEERING**

ACADEMIC DEGREE: FLIGHT DISPATCHER- TECHNICIAN

Course: **BASIC MATHEMATICS**

Code: 0131

Weekly Hours: 3

Code Credit: 4

Laboratory Hours: 2

Course: **SEMINAR OF INDUCTION TO THE COLLEGE STUDENT LIFE**

Code: 0104

Weekly Hours: 0

Code Credit: 0

Laboratory Hours: 0

1 YEAR – FIRST SEMESTER

Course: **AVIATION METEOROLOGY (FIT)**

Code: 8175

Weekly Hours: 3

Code Credit: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: A study of atmospheric composition, circulation, stability and convection, forms of moisture, air masses and fronts, energy cycles, weather hazards to flying; and aviation weather observation, forecasting and report interpretation.

Course: **AERONAUTIC 1 (FIT)**

Code: 8174

Weekly Hours: 3

Code Credit: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: Academic ground training for a Private Pilot Certificate. Required for FAA commercial/instrument pilot certification. Aeronautical topics include principles of flight, FAA regulations, visual flight rules, aircraft systems and performance, meteorology, navigation, aviation physiology and flight planning. Student must attain a score of 70 percent or higher on the FAA / AAC course completion examination.

Course: **COMPOSITION AND RETHORIC (English)**

Code: 8172

Weekly Hours: 3

Code Credit: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: The first two courses in college- level writing skills, Composition and Rethoric focuses on writing essays using various rethorical modes: persuasion, description, comparison and analysis. Basic methods of library research are presented, as

well as the MLA documentation system. Students write one research paper and several essays.

Course: **INTRODUCTION TO COMPUTER APPLICATIONS**

Code: 8171

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: An overview of computers and terminology. Identification of appropriate problems and solution design using specific applications packages. The course includes an introduction to the use of word processors, data managers, spreadsheets and the Internet (E-mail and www browsers).

Course: **PRE-CALCULUS**

Code: 0292

Code Credit: 4

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life, Basic Mathematics

DESCRIPTION: Algebra and trigonometry that are used to develop the skills needed in calculus. Required for students who have minimal algebra and/ or trigonometry preparation, or whose placement test indicated such a need. (Graphic calculator required).

1 YEAR – SECOND SEMESTER

Course: **AVIATION CHEMICAL SCIENCE**

Code: 8231

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: An introduction to the basic principles of general chemistry to include elements, compounds, states of matter, chemical bonds, the periodic table and applications to aviation.

Course: **APPLIED CALCULUS**

Code: 8234

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Pre-Calculus

DESCRIPTION: Elements of differential and integral calculus with application to business, economics, management and the social and life sciences, as well as maxima, minima, rates, exponential growth and decay and some techniques of integrations.

Course: **AERONAUTIC 2 (FIT)**

Code: 8270

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Aeronautic I

DESCRIPTION: Academic instruction for an instrument rating. Required for FAA commercial/instrument pilot certification. Principles of instrument flight, air traffic control, IFR procedures, analyses of weather information, IFR planning, emergency procedures and pilot decisions. Student must attain a score of 70 percent or higher on the FAA course completion examination.

Course: **CIVILIZATION I**

Code: 8240

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: Ancient through medieval. An introduction to Civilization from its early development to the European Renaissance. The emphasis is on the interpretation of primary texts that reflect the intellectual and historical changes in society. This is the first of two interdisciplinary course.

Course: **AVIATION OPERATIONAL SAFETY (FIT)**

Code: 0295

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION:

2 YEAR – FIRST SEMESTER

Course: **WRITING ABOUT LITERATURE**

Code: 8233

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Composition and Rethoric (English)

DESCRIPTION: The second of two courses in college-level writing skills. This course focuses on reading and analyzing poems, plays and shorts works of fiction. Students write several essays and one research paper on literary topics.

Course: **AVIATION PHYSICAL SCIENCE**

Code: 8236

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: An introduction to the basic principles of physics directly applicable to aviation, including properties of matter, mechanics, vibration, wave motion, heat, sound, electricity, magnetism and optics.

Course: **CIVILIZATION 2**

Code: 8245

Weekly Hours: 3

Required Course: Seminar of Induction to the College Student Life

Code Credit: 3

Laboratory Hours: 0

DESCRIPTION: Renaissance Through modern. Similar in purpose and method to Civilization 1, this course continues the interpretation of primary texts in which the emphasis is on the Renaissance period, the Enlightenment, Romanticism and Modern Age.

Course: **PROFESSIONAL COMMUNICATION FOR EXECUTIVES**

Code: 8250

Weekly Hours: 3

Required Course: Seminar of Induction to the College Student Life

Code Credit: 3

Laboratory Hours: 0

DESCRIPTION: Designed for the future executives, this course covers interpersonal and group communication in the professions. Students prepare and deliver a variety of career related presentations.

Course: **INTRODUCTION TO PSYCHOLOGY**

Code: 8235

Weekly Hours: 3

Required Course: Seminar of Induction to the College Student Life

Code Credit: 3

Laboratory Hours: 0

DESCRIPTION: An overview of psychological processes, including both areas in which psychology is a natural science (physiological psychology, sensation and perception, basic learning and cognition) and a social science (motivation, human development, personality, social interaction, psychopathology and psychotherapy).

2 YEAR – SECOND SEMESTER

Course: **AIRLINE OPERATION (FIT)**

Code: 8279

Weekly Hours: 3

DESCRIPTION: Covers Federal U.S. air carrier regulation. Functions and relationships between the various major divisions of a typical air carrier. Prepares the student to take the FAA/AAC written exam for aircraft dispatcher and the FAA/ AAC practical exam to receive an FAA/AAC aircraft Dispatcher Certificate.

Code Credit: 3

Laboratory Hours: 0

Course: **TOPICS ABOUT FLIGHT DISPATCHER**

Code: 8529

Weekly Hours: 3

Code Credit: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: Special topics in flight training, Air traffic controls, Air Space or related topics to the modern aviation industry.

Course: **GENERAL ECOLOGY (ELECTIVE)**

Code: 8268

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: Basic concepts about Ecology and Ecosystem. General Characteristics of the atmosphere. Meteorology Principles. Pollutions. Recycling. Noise. Water Treatment. National and International Law.

Course: **AERONAUTIC 3 (FIT)**

Code: 8275

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Aeronautic 2

DESCRIPTION: Academic ground training for a Commercial Pilot Certificate. Required for FAA / AAC commercial/instrument pilot certification. Topics include airplane performance, VFR cross – country planning, FARs applicable to commercial pilot operations, operation of advanced systems appropriate to complex airplanes and aircrew physiology. Student must attain a score of 70 percent or higher on the FAA/ AAC course completion examination.

Course: **AVIATION LAW**

Code: 8264

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

Required Course: Seminar of Induction to the College Student Life

DESCRIPTION: Provides the student with an overview of the fundamentals of aviation law. Emphasis is placed on factors guiding operational decision making by aviation managers and professional pilots to minimize exposure to legal liability.

Course: **PRACTICAL TRAINING IN FLIGHT DISPATCHER**

Code: 8281

Code Credit: 3

Weekly Hours: 3

Laboratory Hours: 0

DESCRIPTION: Students practice in an Airline Flight Dispatcher Department. Student puts in practice all knowledge acquire during his/her career. It is a minim of three month full time practice.

Subjects taught by Institute of Technology (FIT)