



ADDENDUM FOR ACADEMIC CATALOG 2021-2022

Revised: June 29, 2022

Table of Contents

Application of the Residence Rule Between the UAGM Premises.....	3
Program Educational Objectives and Student Outcomes for ABET-Accredited Programs.....	4
B.S. in Mechanical Engineering	4
B.S. in Industrial and Management Engineering	5
B.S. in Electrical Engineering	6
B.S. in Computer Engineering.....	7
B.S. in Civil Engineering.....	8
A.S. Electronic Engineering Technology	9
A.S. Engineering Technology in Avionic.....	10
Chief Executive Officer Change Notification	12
Bachelor of Sciences in Nutrition and Dietetics	13

Application of the Residence Rule Between the UAGM Premises

The residence credits established in the credit Transfer Policy 16-2020 do not apply to student transfers between the campuses of the Universidad Ana G. Méndez. Students between campuses move with all courses and grades that are part of their academic record. Therefore, these grades will be transferred to their academic record. This includes approved, not approved and transferred courses. For the purposes of the Satisfactory Academic Progress Standard (NPAS) the student must be reevaluated in the campus to which he/she will be moving and the NPAS will be applied according to what corresponds. This rule is of immediate application, so any student who is transferred from the UAGM will be evaluated in accordance with what is established in this document.

Program Educational Objectives and Student Outcomes for ABET-Accredited Programs

The Program Educational Objectives and Student Outcomes are hereby published for the following ABET-accredited programs:

Engineering Accreditation Commission (EAC) of ABET

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Computer Engineering
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Industrial Engineering
- Bachelor of Science in Mechanical Engineering

Engineering Technology Accreditation Commission (ETAC) of ABET

- Associate of Science Degree in Electronic Engineering Technology
- Associate of Science Degree in Engineering Technology in Avionics

This information will be published within the catalog in the 2022-2023 edition.

B.S. in Mechanical Engineering

Goals of the Mechanical Engineering Program

Note: Goal 1 represents the Program Educational Objectives as defined by ABET, that is, “broad statements that describe what graduates are expected to achieve within a few years after graduation”. Goals 2 through 5 are not considered within the ABET definition of Program

Educational Objectives; these are general goals that convey additional program endeavors.

1. (ABET Program Educational Objectives) To provide a thorough education in the fundamentals of mechanical engineering, including thermal, fluid, and mechanical systems, in order to sustain an excellent and accredited undergraduate program with the following expectations for our students, within a few years after graduation:
 - a. to be gainfully employed in mechanical engineering (or related disciplines) or in good academic standing in a program of graduate studies in a variety of fields, including mechanical engineering;
 - b. to be engaged in activities that promote their professional development;
 - c. to participate in organizations that serve their profession.
2. To search for, develop, and use the most effective teaching/learning methodologies that deliver graduates with the attitude and ability to apply practical knowledge in the workplace.
3. To promote scholarly research activities between students and faculty, and to gradually transition from a teaching, to a teaching-and-research program.
4. To encourage enrichment of the educational experience through participation in student chapters of professional societies, special student projects, and industry internships.
5. To review, assess and improve the program on a continuous basis.

Outcomes for the Mechanical Engineering Program

(What students should know and should be able to do by the time of graduation)

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

B.S. in Industrial and Management Engineering

Program Educational Objectives

(Program educational objectives are Broad statements that describe what graduates are expected to attain within a few years after graduation)

Within one-to-four years following graduation:

1. Graduates will gain technical and professional experience in IME, or allied disciplines, via successful employment, self-employment, or pursue graduate studies.
2. Graduates will perform IME related functions, improve, design, redesign, or manage enterprises (i.e., products, activities, business processes in industrial or service settings) with a systems perspective.

Five years after graduation and beyond, and by further developing their engineering and management skills, IME graduates

3. Graduates will advance in their professional careers and progressively assume greater leadership, technical, or managerial roles in their organizations.

Student Outcomes for the Program

(Student outcomes describe what students are expected to know and be able to do by the time of graduation)

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

B.S. in Electrical Engineering

Educational Objectives of the Electrical Engineering Program

(Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation)

1. To apply the principles of the profession to improve the human condition.
2. To be able to gain entrance to a graduate program in electrical engineering or related disciplines.
3. To become leaders in their profession by assuming increasing responsibility within their organizations, serving as role models for their peers, and being effective change agents for the benefit of the organizations that they represent.
4. To demonstrate attainment of professional and technical maturity.

Outcomes for the Electrical Engineering Program

(Student outcomes describe what students are expected to know and be able to do by the time of graduation)

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
8. Knowledge of probability and statistics, including appropriate electrical engineering applications.
9. Knowledge of advanced mathematics, including differential equations, linear algebra, complex variables, and discrete mathematics.
10. An ability to analyze and design complex electrical and electronic devices, software, and systems containing hardware and software components.

B.S. in Computer Engineering

Educational Objectives of the Computer Engineering Program

(Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation)

1. To apply the principles of the profession to improve the human condition.
2. To be able to gain entrance to a graduate program in computer engineering or related disciplines.
3. To become leaders in their profession by assuming increasing responsibility within their organizations, serving as role models for their peers, and being effective change agents for the benefit of the organizations that they represent.
4. To demonstrate attainment of professional and technical maturity.

Outcomes for the Computer Engineering Program

(Student outcomes describe what students are expected to know and be able to do by the time of graduation)

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.

4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
8. Knowledge of probability and statistics, including appropriate computer engineering applications.
9. Knowledge of advanced mathematics, including differential equations, linear algebra, complex variables, and discrete mathematics.
10. An ability to analyze and design complex electrical and electronic devices, software, and systems containing hardware and software components.

B.S. in Civil Engineering

Program Educational Objectives

(Program educational objectives are Broad statements that describe what graduates are expected to attain within a few years after graduation)

A few years after graduation, our Civil Engineering graduates will be able to:

1. Undertake civil engineering design projects giving due consideration to different alternatives, their safety, sustainability and costs, and the needs of stakeholders, while complying with ethical standards in such a way that they become honorable members of our profession.
2. Share, clearly and thoughtfully, their ideas with supervisors, associates, clients and the general public, demonstrating their expertise verbally and in writing, in both English and Spanish.
3. Recognize the limits of their knowledge and have the tools and motivation to continue their professional development.

Student Outcomes for the Program

(Student outcomes describe what students are expected to know and be able to do by the time of graduation)

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

A.S. Electronic Engineering Technology

The Electronic Engineering Technology Program is accredited by the Engineering Technology Accreditation Commission (*ETAC*) of **ABET**, <http://www.abet.org>

The Electronic Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communications systems, and power electronic systems. The program is designed to prepare the individual to become a competent electronic technician capable of working and communicating with engineers, scientists, and production personnel. Their work requires the application of scientific and mathematical theory as well as specialized knowledge and skills in some aspect of technology.

Program Educational Objectives

Graduates of the Electronics Engineering Technology Program are expected to attain the following objectives:

1. Apply their knowledge in math, science, and engineering technology to solve technical problems related to electronic systems (electricity, analog and digital circuits, electronic communication, and microprocessor / embedded systems).
2. Manage, interpret, and communicate technical and non-technical documents in cross functional teams.
3. Apply ethical principles and show respect for diversity and culture.
4. Recognize the importance of continually improving their knowledge through continuing education and formal studies.

Student Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in well-defined technical and nontechnical environments; and an ability to identify and use appropriate technical literature
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and 5. An ability to function effectively as a member of a technical team.

Our curriculum prepares graduates to have competence in the following curricular areas:

1. the application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems; and
2. the application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

A.S. Engineering Technology in Avionic

The Engineering Technology in Avionic Program is accredited by the Engineering Technology Accreditation Commission (**ETAC**) of **ABET**, <http://www.abet.org>

This program will train expert technicians in the field of electronics, you will learn to use specialized tools, measurement equipment and software. In addition, you will train as a specialist in activities related to installation, operation, inspection, maintenance and repair of electronic equipment or systems with technology based on electronics in an industrial environment or technical services. The degree will develop you in skills that enable you to manipulate specialized tools, measuring instruments, and software to test, diagnose, and correct faults.

Program Educational Objectives

Graduates of the Electronics Engineering Technology Program are expected to attain the following objectives:

1. Apply their knowledge in math, science, and engineering technology to solve technical problems related to aircraft electronic systems (radar, communications, navigation, and pulse systems).

2. Manage, interpret, and communicate technical and non-technical documents in cross functional teams.
3. Apply ethical principles and show respect for diversity and culture.
4. Recognize the importance of continually improving their knowledge through continuing education and formal studies.

Student Outcomes

1. an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.
2. an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline.
3. an ability to apply written, oral, and graphical communication in well-defined technical and nontechnical environments; and an ability to identify and use appropriate technical literature
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
5. an ability to function effectively as a member of a technical team

Our curriculum prepares graduates to have competence in the following curricular areas:

1. Applied mechanics, applied aerodynamics, and fundamentals of electricity.
2. Assembly and support processes, industry standards, regulations and documentation, and computer-aided engineering graphics
3. Applied physics having an emphasis in applied mechanics and other technical topics in physics appropriate to the program objectives

Chief Executive Officer Change Notification

UAGM- Gurabo Campus

Office of the Vice Chancellor

Ms. Zoraida Ortiz, Vice Chancellor

UAGM – Cupey Campus

Office of the Vice Chancellor

Dr. Lorna Martínez Toledo, Vice Chancellor

UAGM – Carolina Campus

Office of the Vice Chancellor

Dr. Anthony Rivera González, Vice Chancellor

Bachelor of Sciences in Nutrition and Dietetics

2021-22 Catalog - Undergraduate Degree Programs, page 237-238

Effective January 1, 2024, the minimum degree requirement to be approved for eligibility for the registration examination for dietitians will change from a bachelor's degree to a graduate degree. In order to be approved for registration examination eligibility with a bachelor's degree, students must complete all program and institution requirements and receive a verification statement by December 20, 2023. Demonstrating evidence of completing all eligibility requirements by this date will allow time for the program director to submit the required documents into CDR's REPS before midnight (Central time), December 31, 2023. Program in moratorium process.