

EASTERN FLORIDA STATE COLLEGE AND UNIVERSITY OF CENTRAL FLORIDA
ENGINEERING ARTICULATED PROGRAM

2022-23 UCF ARTICULATED UNDERGRADUATE DEGREE REQUIREMENT

Title of Agreement	ARTICULATED ASSOCIATE IN ARTS AGREEMENT
Major(s)	ENGINEERING
College	COLLEGE OF ENGINEERING AND COMPUTER SCIENCE. COLLEGE OF OPTICS AND PHOTONICS
Degree	BACHELOR OF SCIENCE
Limited Access	NO

INTRODUCTION

The Engineering Articulated Program (EAP) is an articulation agreement which entitles the Eastern Florida State College (EFSC) students to earn credits that will be transferrable toward an engineering baccalaureate degree at UCF while they are in the process of completing the appropriate Engineering Common Program Prerequisite (CPP) courses and earning an Associate in Arts, Pre-Engineering at EFSC. Eastern Florida State College students who successfully complete this AA, Pre-Engineering and Common Program Prerequisites through this program are automatically accepted into the engineering program of their choice after being admitted to the University of Central Florida.

PROVISIONS

- A. To participate in the EAP, EFSC students must:
- Officially select the EAP and the AA, Pre-Engineering by consulting with a EFSC advisor.
 - Seek advisement from a qualified advisor for Pre-Engineering each semester before registering for classes
 - Have selected a specific engineering major by the completion of the first year of the AA, Pre-Engineering Curriculum; and
 - Graduate from EFSC with the AA degree with the sub plan Pre-Engineering
- B. Acceptance of Engineering-related courses taken at Eastern Florida State College:
Up to eight courses may be used toward the Eastern Florida State College AA, Pre-Engineering program and, depending on the engineering major chosen, toward an engineering baccalaureate degree at UCF: EGS 1006 Introduction to the Engineering Profession (UCF course number EGS 1006C or equivalent), EGN 1007 Engineering Concepts and Methodologies (UCF course number EGN 1007C), EGN 2312, Engineering Analysis-Statics (UCF course number EGN 3310 or equivalent), EGN 2322, Engineering Analysis-Dynamics (UCF course number EGN 3321 or equivalent), EGN 2440 Probability and Statistics for Engineers (UCF course number STA 3032 or equivalent), EGS 2004 Electrical Networks (UCF course number EEL 3004) and EGS 2613 Engineering Economic Analysis (UCF course number EGN 3613)
If one or more of the above courses are within the approved Restricted or Technical Electives determined by any UCF Engineering Department, these courses are also transferable.
Eastern Florida State College may develop and teach courses equivalent to these eight courses. Such courses will be accepted in transfer by the UCF College of Engineering and Computer Science as being equivalent to the indicated UCF courses if they satisfy the following characteristics:

- a. ABET course control documents prepared and supplied by the UCF College of Engineering and Computer Science must be used for defining these courses.
- b. The current UCF College of Engineering and Computer Science syllabus for each of these courses must be used to describe the contents of that course as it is to be taught each semester.
- c. Qualified EFSC faculty (master's degree and 18 hours within engineering) may teach these courses provided they are meeting SACSCOC requirements for faculty

Note: Pre-requisites for all engineering courses must be satisfied prior to enrollment in those courses.

UCF ENGINEERING B.S.

Once at UCF, students in the EAP will have the same priority as native UCF students for all scheduled classes required for completing the Bachelor of Science (B.S.) in their selected engineering major. This degree may be earned from the UCF College of Engineering and Computer Science in any of the following majors.

1. Aerospace Engineering (B.S.A.E.)
2. Civil Engineering (B.S.C.E.)
3. Computer Engineering (B.S. Cp.E.)
4. Construction Engineering (B.S.Con.E.)
5. Electrical Engineering (B.S.E.E.)
6. Environmental Engineering (B.S.Env.E.)
7. Industrial Engineering (B.S.I.E.)
8. Materials Science and Engineering (B.S.M.S.E)
9. Mechanical Engineering (B.S.M.E)
10. Photonics Science and Engineering (B.S.P.S.E.) *offered jointly by the UCF College of Optics and Photonics*

EFSC to UCF ENGINEERING ARTICULATED COURSE EQUIVALENCIES

EFSC	UCF	Title
EGN2312	EGN3310	Engineering Analysis - Statistics
EGN2440	STA3032	Probability and Statistics for Engineers
EGN2322	EGN3321	Engineering Analysis - Dynamics
EGS1006	EGS1006C	The Introduction to the Engineering Profession
EGN1007	EGN1007C	Engineering Concepts and Methods
EGS2613	EGN3613	Engineering Economic Analysis
EGS2004	EEL3004	Electrical Networks
EGS2373	EGN3373	Principals of Electrical Engineering

REQUIREMENTS FOR THE ENGINEERING B.S.

To earn a UCF engineering B.S. through the EAP, the student must meet all the graduation requirements listed in the UCF Undergraduate Catalog for the appropriately selected year of the students' choice. This catalog will include the following:

AEROSPACE ENGINEERING

Students intending to major in Aerospace Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2373	Principles of Electrical Engineering	PHY 2049C; CR: MAP 2302

CIVIL ENGINEERING

Students intending to major in Civil Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2613	Engineering Economic Analysis	PR: MAC2311

COMPUTER ENGINEERING

Students intending to major in Computer Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EEL	2004	Electrical Networks	MAC2313; PHY 2048C; PHY 2049C; CR: MAP 2302

CONSTRUCTION ENGINEERING

Students intending to major in Construction Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2613	Engineering Economic Analysis	PR: MAC2311

ELECTRICAL ENGINEERING

Students intending to major in Electrical Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGS	2004	Electrical Networks	PR: MAC2313, PHY2048C, PHY2049C CR: MAP2302

ENVIRONMENTAL ENGINEERING

Students intending to major in Environmental Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2613	Engineering Economic Analysis	PR: 2311

INDUSTRIAL ENGINEERING

Students intending to major in Industrial Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2373	Principles of Electrical Engineering	PHY 2049C; CR: MAP 2302

MATERIAL SCIENCES AND ENGINEERING

Students intending to major in Materials Science and Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2373	Principles of Electrical Engineering	PHY 2049C; CR: MAP 2302
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312

MECHANICAL ENGINEERING

Students intending to major in Mechanical Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
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EGN	1007	Engineering Concepts and Methods (1hr)	None
EGN	2312	Engineering Analysis-Statistics	PR: MAC2311; PHY2048C; CR: MAC2312
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312
EGN	2322	Engineering Analysis-Dynamics	PR: MAC2312, MAC2313; EGN2312
EGN	2373	Principles of Electrical Engineering	PHY 2049C; CR: MAP 2302

PHOTONICS SCIENCE AND ENGINEERING

Students intending to major in Photonics Science and Engineering should include the following lower division prerequisite program courses within their AA:

EGS	1006	Intro to the Engineering Profession (1hr)	None
EGN	1007	Engineering Concepts and Methods (1hr)	None
EGS	2004	Electrical Networks	PR: MAC2313, PHY2048C, PHY2049C; CR: MAP2302
EGN	2440	Probability and Statistics for Engineers	PR: MAC2312

UCF B.S. Requirements

To earn a UCF Engineering B.S. through E.A.P., the student must meet all the graduation requirements listed in the UCF Undergraduate Catalog for the appropriate catalog year. This catalog will include the following:

UCF Graduation Requirements

- A. General Education Program Requirement (completed as part of the AA)
- B. Common Program Prerequisites (completed to fulfill requirements of the Pre-Major in Engineering Associate in Arts)
- C. Program Requirements
 - a. Students wanting to declare a major in an engineering discipline must complete a change of major after the withdrawal deadline in the term of completion of the final pending prerequisite courses
 - b. Core Requirements: Basic Level (2 hours). The College of Engineering and Computer Science requires that all engineering students to achieve a minimum 2.25 GPA in completing these courses together with the core requirements listed in sections 3 and 4 below, and with the capstone requirements. Independent study courses do not satisfy major requirements
 - c. Core Requirements: Advanced Level (51)
 - d. Restricted Electives (variable)
 - e. Capstone Requirements (6 hours) these courses are a capstone course experience to the engineering program and should be completed in the last two major semesters of study
- D. College/School Exit Requirements
 - a. Students must complete an exit survey
 - b. Computer competency is met by completion of the major
 - c. Resident Requirement: at least 24 semester hours of regularly scheduled 3000-5000 level courses taken from the College of Engineering and Computer Science at UCF
 - d. 18 of the 24 residency hours must be 4000-5000 level
- E. University Minimum Exit Requirements

- a. 2.0 UCF GPA
- b. 60 semester hours earned after CLEP awarded
- c. 42 semester hours of upper division credit must be completed
- d. 30 of the last 39 hours of course work must be completed in residency at UCF
- e. A maximum of 45 hours of extension, correspondence, CLEP, credit by exam, and Armed Forces credits permitted
- f. Complete the General Education Program, the Gordon Rule, Civic Literacy and nine hours of summer credit (if applicable)

AGREEMENT PROVISIONS

Admission to UCF and the College of Engineering and Computer Science

Students who have completed their Associate of Arts degree at Eastern Florida State College as described herein and maintain a 2.0 GPA (not counting grade forgiveness) in transfer work will be accepted to the UCF College of Engineering and Computer Science as either an engineering major (if grades of C (2.0) or better have been earned in MAC 2311, MAC 2312, PHY 2048C, and either CHS 1440 or CHM 2045C (or equivalent courses) or otherwise as an engineering pending major after being admitted to the University of Central Florida.

Foreign Language Admission Requirement

Students who have not completed two units of the same language or American Sign Language in high school should complete a minimum of eight semester hours of college level foreign language or demonstrate proficiency at EFSC. Students admitted to UCF without completing this requirement must satisfy it prior to graduation from the University.

Immunization

Students who matriculate at a state university are required to provide proof of immunization against Rubeola (measles) and Rubella (German measles) prior to enrollment.

Updates

This agreement is subject to change by legislative action, the Department of Education, the Florida Board of Education, the University of Central Florida or its Board of Trustees, Eastern Florida State College or its Board of Trustees, or external accrediting agencies. This agreement will be reviewed by both parties on a yearly basis to ensure the timeliness of this document.

Resources

Resources for implementation of the Agreement may come from either party, depending upon budgetary availability. No party hereto is obligated hereby to expend any resources whatsoever in connection with this Agreement. No implementation of any portion of the Agreement, or commencement of any specific projects, may be initiated prior to the written assurance of such budgetary availability to the other party hereto. To the extent any external funding is required by the university in order to implement this Agreement and funding for such purposes is not appropriated to the university by the Legislature of the State of Florida or is not otherwise available to the university, the university shall thenceforth have no further financial obligations hereunder. In the event the university does not have sufficient legislative appropriations to carry out any obligations under this Agreement, it shall immediately notify Eastern Florida State College of such fact and of such portions of this Agreement that may be deemed terminated as a result of such failure of appropriations.

AGREEMENT TERMS

- A. This agreement shall become effective on the date the last signature is affixed hereto. It may be automatically renewed for additional one (1) year periods unless either party provides the other the notice no later than sixty (60) days prior to the expiration of the preceding term that it wishes to terminate this Agreement as set forth herein, the other party has the right to terminate this Agreement immediately upon written notice to the other.
- B. Notices with respect to rights and obligations of each party hereto shall be provided as follows:

University of Central Florida

Michael Johnson, Provost and Executive Vice President for Academic Affairs
Theodorea Berry, Vice Provost for Student Learning and Academic Success, & Dean, College of Undergraduate Studies.
David Hagan, Dean, College of Optics and Photonics.
Michael Georgiopoulos, Dean, College of Engineering and Computer Sciences.
Manoj Chopra, Associate Dean for Academic Affairs, College of Engineering and Computer Sciences.
Patrick Likamwa, Associate Dean for Academic Programs, College of Optics and Photonics.
Harrison Oonge, Assistant Dean, College of Undergraduate Studies.

Eastern Florida State College

Randy Fletcher, Vice President for Academic and Student Affairs
Beth Rountree, Mathematics and Engineering Chair

- C. Modifications or additions to or deletion from this agreement must be in writing and be signed by both parties. The designated representatives for the university and college on behalf of the respective boards of trustees are listed below

APPROVALS

University of Central Florida

Eastern Florida State College

Dr. Michael Johnson Date
Provost and
Executive Vice President for Academic Affairs

Dr. Randy Fletcher Date
Vice President for Academic and Student Affairs
And Chief Learning Officer