

# **THE ENGINEERING ARTICULATED PROGRAM**

An Articulation Agreement between  
Eastern Florida State College  
and  
University of Central Florida

## **INTRODUCTION**

The Engineering Articulated Program (EAP) is an articulation agreement which entitles Eastern Florida State College (EFSC) students to earn credits that will be transferable toward an engineering baccalaureate degree at UCF while they are in the process of completing the appropriate Engineering Common Program Prerequisite courses and earning an Associate of Arts degree, Pre-Engineering at EFSC. Eastern Florida State College students successfully completing 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.

### **EFSC ARTICULATED PRE-MAJOR IN ENGINEERING AA DEGREE**

- A. To participate in the EAP, Eastern Florida State College students must:
1. officially select the EAP and the AA, Pre-Engineering by consulting with a EFSC advisor,
  2. seek advisement from a qualified advisor for Pre-Engineering each semester before registering for classes,
  3. have selected a specific engineering major by the completion of the first year of the AA, Pre-Engineering curriculum, and
  4. graduate from EFSC with the AA degree, with sub plan Pre-Engineering.
- B. Acceptance of Engineering-related Courses taken at Eastern Florida State College:

Up to seven 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 EGN 1006C or equivalent), EGN 1007 Engineering Concepts and Methods (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 2613 Engineering Economic Analysis (UCF course number EGN 3613) and EGS 2004 Electrical Networks (UCF course number EEL 3004).

Eastern Florida State College may develop and teach courses equivalent to these seven 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 provided that 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 meet SACS requirements for faculty.

**NOTE:** Prerequisites 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.

- |   |   |
|---|---|
| a) Aerospace Engineering (B.S.A.E.)       | g) Industrial Engineering (B.S.I.E.)  |
| b) Civil Engineering (B.S.C.E.)           | h) Mechanical Engineering (B.S.M.E.)  |
| c) Computer Engineering (B.S. Cp.E.)      | i) Photonics Science and Engineering (B.S .P.S.E.) <i>offered jointly by the UCF College of Optics and Photonics and Computer Science &amp; Engineering</i> |
| d) Construction Engineering (B.S.)        |   |
| e) Electrical Engineering (B.S.E.E.)      |   |
| f) Environmental Engineering (B.S.Env.E.) |   |

### **EFSC TO UCF ENGINEERING ARTICULATED COURSE EQUIVALENCIES**

<b>EFSC</b>	<b>UCF</b>	<b>TITLE</b>
EGN 2312	EGN 3310	Engineering Analysis - Statistics
EGN 2440	STA 3032	Probability and Statistics for Engineers
EGN 2322	EGN 3321	Engineering Analysis – Dynamics
EGS 1006	EGN 1006C	Introduction to the Engineering Profession
EGN 1007	EGN 1007C	Engineering Concepts and Methods
EGS 2613	EGN 3613	Engineering Economic Analysis
EGS 2004	EEL 3004	Electrical Networks (PR: MAC 2313, PHY 2048C, PHY 2049C CR: MAP 2302)

## **REQUIREMENTS FOR THE UCF 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. Generally, 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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; MAC 2313; EGN 2312) (CR: MAP 2302)</b>

### **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; EGN 2312) (CR: MAC 2313)</b>
EGS	2613	Engineering Economic Analysis	<b>(PR: MAC2311)</b>

## **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; EGN 2312) (CR: MAC 2313)</b>
EGS	2004	Electrical Networks	<b>(PR: MAC 2313, PHY 2048C, PHY 2049C CR: MAP 2302)</b>

## **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; EGN 2312) (CR: MAC 2313)</b>
EGS	2613	Engineering Economic Analysis	<b>(PR: MAC2311)</b>

## **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>

EGN	2312	Engineering Analysis-Statics	(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)
EGN	2440	Probability and Statistics for Engineers	(PR: MAC 2312)
EGN	2322	Engineering Analysis-Dynamics	(PR: MAC 2312; EGN 2312) (CR: MAC 2313)
EGS	2004	Electrical Networks	(PR: MAC 2313, PHY 2048C, PHY 2049C) (CR: MAP 2302)

### **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
EGS	2613	Engineering Economic Analysis	(PR: MAC2311)
EGN	2312	Engineering Analysis-Statics	(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)
EGN	2440	Probability and Statistics for Engineers	(PR: MAC 2312)
EGN	2322	Engineering Analysis-Dynamics	(PR: MAC 2312; EGN 2312) (CR: MAC 2313)

### **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-Statics	(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)
EGN	2440	Probability and Statistics for Engineers	(PR: MAC 2312)
EGN	2322	Engineering Analysis-Dynamics	(PR: MAC 2312; EGN 2312) (CR: MAC 2313)

## **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; MAC 2313; EGN 2312) (CR: MAP 2302)</b>

## **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)	<b>None</b>
EGN	1007	Engineering Concepts and Methods (1hr)	<b>None</b>
EGN	2312	Engineering Analysis-Statics	<b>(PR: MAC 2311; PHY 2048C) (CR: MAC 2312)</b>
EGN	2440	Probability and Statistics for Engineers	<b>(PR: MAC 2312)</b>
EGN	2322	Engineering Analysis-Dynamics	<b>(PR: MAC 2312; EGN 2312) (CR: MAC 2313)</b>
EGS	2004	Electrical Networks	<b>(PR: MAC 2313, PHY 2048C, PHY 2049C CR: MAP 2302)</b>

## **AGREEMENT PROVISIONS**

### **Admission to UCF**

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 take effect on January 1, 2017, and shall terminate on December 31, 2017. It may be automatically renewed for additional one (1) year periods unless either party provides the other notice no later than sixty (60) days prior to the expiration of the preceding term that it wishes to terminate this Agreement. If either party fails to follow the terms and conditions of the 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:**

Dr. A. Dale Whittaker, Provost and Executive Vice President

Dr. Elizabeth A. Dooley, Vice Provost and Dean, Teaching and Learning & College of Undergraduate Studies

Dr. Charles Reilly, Associate Dean, College of Engineering and Computer Science

Dr. Michael Georgiopoulos, Dean, College of Engineering and Computer Science

Dr. Bahaa Saleh, Dean, College of Optics and Photonics

**Eastern Florida State College:**

Dr. Linda Miedema, Vice President Academic and Student Services


Dr. Mevlut Guvendik, Professor Cocoa Science Department

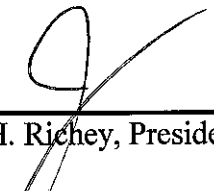
C. Modifications or additions to, or deletions from this Agreement must be in writing and signed by both parties. The designated representatives for the university and college on behalf of their respective boards of trustees are listed below.

**APPROVALS**

**UNIVERSITY OF CENTRAL FLORIDA**

**EASTERN FLORIDA STATE COLLEGE**

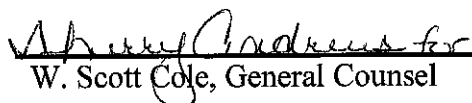
  
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Dr. John C. Hitt, President

  
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Dr. James H. Richey, President

11/23/16  
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Date

11/14/16  
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Date

Legal Content Approved:

  
\_\_\_\_\_  
W. Scott Cole, General Counsel

11/22/16  
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Date