



## AA Pathway: Bachelor of Science Industrial Engineering at UCF

Code: AA/GENRUCIN

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This transfer GPS prepares students to pursue a four-year degree in Industrial engineering at the University of Central Florida through the Engineering Articulated Program (EAP). This is an articulation agreement that 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 in Arts degree at EFSC. Eastern Florida State College students successfully completing this A.A. 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 A.A. Degree**

A. To participate in the EAP, Eastern Florida State College students must:

- a. officially select the EAP and the A.A. UCF articulated pathway by consulting with an EFSC advisor,
- b. seek advisement from a qualified advisor for the EAP each semester before registering for classes,
- c. have selected a specific engineering major by the completion of the first year of the A.A. EAP
- d. graduate from EFSC with the A.A. degree, with the UCF articulated pathway courses completed

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 A.A., articulated pathway 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).

**NOTE:** Prerequisites for all engineering courses must be satisfied prior to enrollment in those courses.

Students are encouraged to [consult an EFSC advisor](#) and check with the advising or admissions office at the intended transfer institution.

**Possible Concentrations at UCF:** Industrial Engineering

**Potential Careers:** Industrial engineer

**Meta-Major:** Science, Technology, Engineering, and Math

**Foreign Language Requirement:** Students must demonstrate competency in a foreign language at a level equal to two years of high school world language (sequential, in the same language) or American Sign Language coursework. This is pursuant to F.S. 1007.262.

**Civic Literacy Competency:** Per F.S. 1007.25 (4) - Beginning with students initially entering a Florida College System institution or state university in the 2018-2019 school year and thereafter, each student must demonstrate competency in civic literacy.

### **Important Notes:**

- This pathway is for planning purposes only; it does not guarantee admission to a college or university other than UCF. Following the suggested course sequence for completion will better prepare you for transfer and acceptance.
- Some courses have prerequisites that may increase the time and credits required to complete the degree. You may complete A.A. requirements prior to completing this pathway, which may impact your financial aid.

- Contact UCF no later than the completion of 30 credit hours regarding admission requirements and deadlines.
- Courses identified by <sup>PATHWAY COURSE</sup> are recommended or required for admission into the bachelor's degree
- If you qualify and are eligible for Federal Financial Aid, you may only receive funding assistance for up to 60 credit hours towards your Associate in Arts degree. Please see your Assigned Advisor to discuss loan options In excess of 60.

#### TERM 1

Course	Course Title	Subject Area	Credits	Notes:
ENC 1101	Composition 1	Gen Ed/ Communications	3	
MAC 1105	College Algebra	Gen Ed/ Math	3	
EGS 1006	Intro to the Engineering Profession <sup>PATHWAY COURSE</sup>	Elective	1	
SPC 2608	Fundamentals of Speech Communication	Gen Ed/ Communications	3	
	Social Science Option (List 2)	Gen Ed/ Social Science	3	
		<b>Term Total</b>	<b>13</b>	

#### TERM 2

Course	Course Title	Subject Area	Credits	Notes:
CHM 1045/L	General Chemistry 1 with Lab* <sup>PATHWAY COURSE</sup>	Gen Ed/ Physical Science	4	
ENC 1102	Composition 2	Gen Ed/ Communications	3	
MAC 1140	Pre-Calculus Algebra**	Gen Ed/ Math	3	
& MAC 1114	College Trigonometry**	Gen Ed/ Math	3	
Or MAC 1147	Precalculus Algebra/Trigonometry**	Gen Ed/ Math or Elective	5	
		<b>Term Total</b>	<b>12 - 13</b>	

#### TERM 3

Course	Course Title	Subject Area	Credits	Notes:
MAC 1311	Calculus 1 w Analytic Geometry <sup>PATHWAY COURSE</sup>	Gen Ed/ Math or Elective	5	
	Humanities List 1	Gen Ed/ Humanities	3	
	Behavioral Science Option (List 1)	Gen Ed/ Behavioral Science	3	
	Social/Behavioral Science Option (List 3)	Gen Ed/ Beh/Social Science	2 - 3	
		<b>Term Total</b>	<b>13 - 14</b>	

#### TERM 4

Course	Course Title	Subject Area	Credits	Notes:
MAC 2312	Calculus 2 w Analytic Geometry <sup>PATHWAY COURSE</sup>	Gen Ed/ Math or Elective	5	
PHY 2048/L	General Physics 1 with Lab <sup>PATHWAY COURSE</sup>	Gen Ed/Physical Science	5	
EGN 1007	Engineering Concepts and Methods <sup>PATHWAY COURSE</sup>	Elective	1	
	Humanities List 2	Gen Ed/ Humanities	3	
		<b>Term Total</b>	<b>14</b>	

#### TERM 5

Course	Course Title	Subject Area	Credits	Notes:
EGN 2312	Engineering Analysis: Statics <sup>PATHWAY COURSE</sup>	Elective	3	
PHY 2049/L	General Physics 2 with Lab <sup>PATHWAY COURSE</sup>	Gen Ed/Physical Science	5	
MAC 2313	Calculus 3 w Analytic Geometry <sup>PATHWAY COURSE</sup>	Gen Ed/ Math or Elective	5	
		<b>Term Total</b>	<b>13</b>	

**TERM 6**

Course	Course Title	Subject Area	Credits	Notes:
EGN 2322	Engineering Analysis: Dynamics <small>PATHWAY COURSE</small>	Elective	3	
MAP 2302	Differential Equations <small>PATHWAY COURSE</small>	Elective	3	
EGN 2440	Probability & Statistics for Engineers <small>PATHWAY COURSE</small>	Elective	3	
		<b>Term Total</b>	<b>9</b>	

***Total AA Credits 60; Cumulative Total with Pathway Courses 75***

## Notes:

\* Prerequisite for CHM 1045 is MAT 1033 with a grade of "C" or higher. Co-Requisite: CHML 1045.

\*\*Students may take MAC1140-Precalculus Algebra AND MAC1114-Trigonometry instead of MAC 1147 if they did not take trigonometry in high school

\*\*\*Students may need PHY2025-Introduction to Physics as prerequisite.

**Additional Resources**

- Learn more about the [Engineering Programs at EFSC](#)
- Use [EFSC's Career Coach Tool](#)
- View the [UCF Engineering Articulated Program Articulation Agreement](#)
- View [UCF's Industrial Engineering Website](#)