

PROPOSAL APPLICATION

Form No. SAAT-02

Section (s.) 1007.25(9), Florida Statutes (F.S.), and Rule 6A-14.094, Florida Administrative Code (F.A.C.), outline the requirements for Florida College System institution specialized associate in arts transfer degree program proposals. The completed Proposal Application shall be submitted by the college president to the chancellor of the Florida College System at ChancellorFCS@fldoe.org.

CHECKLIST

The proposal requires completion of the following components:

- Institution Information
- Program summary
- Program description
- Rationale for the specialized associate in arts transfer degree program length
- Coursework beyond the 60 credits required for a general associate in arts degree program
- Workforce demand and unmet need of the articulated baccalaureate degree program
- Program of study to include all predetermined performance and graduation requirements
- Articulation agreement between the college and the state university (Attach to Appendix A)
- Documented alignment between college exit and state university admission requirements
- College response to state university comments to the notice of intent
- Program implementation timeline

PROPOSING FLORIDA COLLEGE SYSTEM INSTITUTION INFORMATION

Institution Name:	Valencia College
Institution Contact:	LaVonda Walker

PROPOSING FLORIDA COLLEGE SYSTEM INSTITUTION INFORMATION

Institution Name:	University of Central Florida
Institution Contact:	Harrison Oonge

PROPOSING FLORIDA COLLEGE SYSTEM INSTITUTION INFORMATION

1.1	Specialized associate in arts transfer degree program name.	Mechanical Engineering
1.2	Specialized associate in arts transfer degree program length (credit hours).	60-83 Credit Hours
1.3	How will the proposed specialized associate in arts transfer degree program be delivered (check all that apply)?	<input type="checkbox"/> Face-to-face (F2F) (Entire degree program delivered via F2F courses only) <input type="checkbox"/> Completely online (Entire degree program delivered via online courses only) <input checked="" type="checkbox"/> Combination of face-to-face/online (Entire degree program delivered via a combination of F2F and online courses)
1.4	Type and name of the baccalaureate degree program to which the specialized associate in arts transfer degree program articulates (check only one).	<input checked="" type="checkbox"/> Bachelor of Science (BS) Please specify the program name below: Mechanical Engineering BSME <input type="checkbox"/> Bachelor of Applied Science (BAS) Please specify the program name below:
1.5	Classification of Instructional Program (CIP) code (6-Digit) of the baccalaureate degree program to which the specialized associate in arts transfer degree program articulates.	Mechanical Engineering CIP 14.1901
1.6	Anticipated specialized associate in arts transfer degree program implementation date.	2025-2026 Academic Year

PROGRAM DESCRIPTION

2.1 This section will serve as an **executive summary** of this proposal. This section must include: the rationale for the specialized transfer degree program length, demand and unmet need of the articulated baccalaureate degree program in the state university's workforce area, and an overview of the program curriculum to include the proposed coursework beyond the sixty (60) credits required for a general associate in arts degree.

- Rationale for the specialized associate in arts transfer degree program length: Our goal is to have students transfer to the university ready to be admitted to the major. This includes completing the Common Program Prerequisites and core coursework required by the major college for admission.

The number of credits may vary from 60-83 based on math entry assessment placement, high school foreign language completion, and high school chemistry and algebra completion. Students may place directly into MAC 2311 Calculus I with entry assessment scores. If they do, they will not need to complete 12 credits of prerequisite coursework. Students may satisfy the foreign language graduation requirement by successfully completing two years of the same foreign language in high school. This means they will not need to complete 8 credits of college-level foreign language coursework. If students have successfully completed one year of high school chemistry, and MAC 1105 or honors high school Algebra II with a minimum grade of C, they be able to go directly into CHM 1045C. This bypasses the 4 credit CHM 1025C Introduction to General Chemistry course.

If students have satisfied math, foreign language and chemistry requirements through entry assessment placement or high school coursework, courses listed in the coursework beyond 60 table will satisfy credits in the elective block. Coursework included in General Education totals 38 credits so the elective credit block will be satisfied with only 22 credits.

- Demand and unmet need of the university's articulated baccalaureate degree program:
Average 7.8% growth rate of employment projections
Annual average of 501 total job openings
The number of degrees awarded by the University of Central Florida has a 5-year average of 433 which yields an unmet need of 68-77 in our region.
Requires a baccalaureate degree for educational level per Florida Labor Market Estimating and Bureau of Labor Statistics

The demand for articulated baccalaureate degree programs in engineering within the state university's workforce area is robust, as evidenced by a projected average growth rate of 7.8% in employment for these engineering-related professions. On an annual average, there are approximately 501 job openings in the Mechanical engineering sector, all of which require a baccalaureate degree as specified by the Florida

Labor Market Estimating and the Bureau of Labor Statistics. This data suggests a vibrant job market for graduates of an articulated baccalaureate degree program in engineering, highlighting substantial demand for employment workforce needs.

- Curriculum and coursework beyond 60 credits for a general associate in arts degree:

CURRENT Valencia College Degree Pathway – Engineering - Mechanical		
Course Prefix/Number	Course Title	Credits
<i>Communications</i>	ENC 1101	3
<i>Communications</i>	ENC 1102	3
<i>Oral Communications</i>	SPC 1608 or SPC 1017	3
<i>Humanities</i>	Humanities Core	3
<i>Mathematics</i>	MAC 2311 – Analytical Geometry/Calculus I	4
<i>Mathematics</i>	MAC 2312 – Analytical Geometry/Calculus II	4
<i>Natural Sciences</i>	PHY 2048C – General Physics with Calculus I	4
<i>Natural Sciences</i>	PHY 2049C – General Physics with Calculus II	4
<i>Natural Sciences</i>	CHM 1045C – General Chemistry I and Laboratory	4
<i>Social Sciences</i>	Civic Literacy	3
<i>Gen Ed Student Choice</i>	MAC 1114 or any other Gen Ed course (3)	3
<i>Elective Block*</i>	MAT 1033C (3), MAC 1105 (3), MAC 1140 (3), CHM 1025C (4), Foreign Language (8), EGS 1006C (1)	22
Program Total		60

Coursework Beyond 60 Credits for a General Associate in Arts Degree

Course Title	Credits
COP 2220 C Programming	3
EGN 1007C Engineering Concepts & Methods	1
EGN 2440 Probability and Statistics for Engineers	3
EGN 2312 Engineering Analysis – Statics	3
EGN 2322 Engineering Analysis - Dynamics	3
EGS 2373C Principles of Electrical Engineering	3
MAC 2313 General Calculus III	4
MAP 2302 Differential Equations	3
Additional Coursework Total	23
*If students have satisfied math, foreign language and chemistry requirements through entry assessment placement or high school coursework, courses listed in the coursework beyond 60 table will satisfy credits in the elective block. Coursework included in General Education totals 38 credits so the elective credit block will be satisfied with only 22 credits.	

WORKFORCE DEMAND AND UNMET NEED

3.1 Describe the workforce demand and unmet need of the baccalaureate degree program to which the specialized associate in arts transfer degree program articulates that incorporates, at a minimum, the shaded information from Sections 3.1.1 and 3.1.3. For proposed programs without a listed Standard Occupational Classification (SOC) linkage, provide a rationale for the identified SOC code(s). If using a SOC that is not on the CIP to SOC crosswalk, please justify why the SOC aligns with the articulated baccalaureate degree program.

Mechanical engineering is a versatile discipline which covers a wide range of industries in Central Florida with a positive job outlook. Mechanical engineers are in demand by Aerospace and Defense, including major players like Lockheed Martin, Northrop Grumman, and Siemens Energy who are essential in the design, testing, and manufacturing of components for aircraft, missiles, and defense systems. The Simulation and Training industry in Orlando is known as the "Simulation Capital of the World," with a significant number of companies involved in simulation and training technologies for the military which require a significant need for mechanical engineers. Additionally, Central Florida has a growing manufacturing sector such as the automation and robotics industries which need mechanical engineers for product design, process improvement, and quality control. As the focus on renewable energy grows, there is a demand for mechanical engineers to work on projects related to solar power, wind energy, and other sustainable energy sources. Siemens Energy has a strong presence in Orlando where mechanical engineers work on energy-efficient technologies. Mechanical engineers play a major role in the design, maintenance, and optimization of power plants and other energy-related infrastructure.

The Florida Commerce employment data and projections indicate that from 2024 through 2032, the total job openings for the SOCs aligned with the program CIP identified in Section 1.5 is averaged at 501. However, these job openings are specific to region 12 and the regional and state-wide trends are estimated to be higher. The number of degrees awarded by the University of Central Florida has a 5-year average of 433 which yields an unmet need of 68-77 in our region.

3.2 Describe any other evidence of workforce demand and unmet need of the articulated baccalaureate degree program, which may include qualitative or quantitative data and information not reflected in the data presented in Sections 3.1.1 and 3.1.3, such as local economic development initiatives, emerging industries in the area, or evidence of rapid growth.

The U.S. Bureau of Labor Statistics projects that employment for related occupations will grow by about 19%. The BLS 2023 employment data and projections show 601 jobs listed in the table below. These SOCS are related to engineering programs listed to the CIP in section 1.5 (CIP to SOC crosswalk). State-wide trends are much higher.

U.S. Bureau of Labor Statistics (BLS) 2023 Occupational Employment Estimates

SOC #	Occupation	Annual Opening	% Growth	Education
13-1051	Cost Estimators	275	3.6	B
17-2011	Aerospace Engineers	40	11.6	B
17-2112	Industrial Engineers	286	4	B

3.1.3 The Excel spreadsheet below is set up with predefined formulas. To activate the spreadsheet, right click within the spreadsheet, go to “Worksheet Object”, and then “Open”. To exit, save any changes and exit out of the spreadsheet. Alternatively, double click anywhere on the table. To exit the spreadsheet, single click anywhere outside of the table.

CLICK [HERE](#) FOR INSTRUCTIONS FOR COMPLETING THE ESTIMATES OF UNMET NEED SECTION: If data are not available for completers in the university’s workforce area, please report statewide data. You may note these are statewide figures.

	Demand	Supply		Range of Estimated Unmet Need	
	(A)	(B)	(C)	(A-B)	(A-C)
	Total Job Openings	Most Recent Year	5-Year average or average of available years if less than five	Difference	Difference
Florida Commerce Total	501	424	433	77	68
Other Totals				0	0

SPECIALIZED ASSOCIATE IN ARTS TRANSFER DEGREE REQUIREMENTS

4.1 In accordance with Section (s.) 1007.25(9)(b)(3), Florida Statutes (F.S.), except for developmental education required pursuant to s. 1008.30, F.S., all required coursework must count toward the specialized associate in arts transfer degree or the baccalaureate degree.

Requirement Area	Predetermined and Specified Performance Requirements
General Education Core	Pursuant to s. 1007.25(3) and Rule 6A-14.0303, F.A.C., complete at least one general education core course in each of the five subject disciplines (communications, mathematics, humanities, social science, natural science) for a total of 15 credits to fulfill the general education requirement. (Note: Approved accelerated mechanisms may be used to fulfill this requirement.)
Institutional General Education	Pursuant to s. 1007.25(3) and Rule 6A-14.0303, F.A.C., complete the remaining 21 credits, in addition to the core, for a total 36 credits of institutional general education to fulfill the general education requirement. (Note: Approved accelerated mechanisms may be used to fulfill this requirement.)
Electives	Pursuant to s. 1007.25(9) complete the remaining 24 elective credits to fulfill the total 60 credits for the attainment of an associate degree. (Note: Electives should be selected by program and/or pathway and may be used to fulfill associate in arts requirements and/or baccalaureate program prerequisites. Approved accelerated mechanisms may be used to fulfill this requirement.)
Communications and Computation	Pursuant to 6A-10.030, F.A.C., complete 6 credits in English and 6 credits in mathematics to fulfill the assessment procedures for college-level communication and computation. (Note: Institutional general education courses and/or electives may be used to fulfill this requirement. Approved accelerated mechanisms may be used to fulfill this requirement.)
Foreign Language	Pursuant to s. 1007.262, F.S., and Rule 6A-10.02412, F.A.C., complete 2 years in high school or 8 college credits in the same foreign language, which may be satisfied via CLEP or challenge exam. (Note: Institutional general education courses and/or electives may be used to fulfill this requirement. Approved accelerated mechanisms may be used to fulfill this requirement.)
Civic Literacy	Pursuant to s. 1007.25(5), F.S. and Rule 6A-10.02413, F.A.C., complete a course (3 credits) and an assessment to fulfill the civic literacy competency requirement. (Note: Institutional or core general education courses and/or electives may be used to fulfill the course requirement. Approved accelerated mechanisms may be used to fulfill this requirement.)
Requirements Beyond Sixty (60) Credits	
Specialized Coursework	Pursuant to s. 1007.25(5), F.S. and Rule 6A-14.094, F.A.C., complete additional specified credits beyond the 60 credits required for the general associate in arts degree for admission to a baccalaureate degree program. (Note: Specialized coursework may include course-level prerequisites as part of the specialized associate in arts transfer degree program, baccalaureate degree program prerequisites, or a combination).
Baccalaureate Program Prerequisites	The proposing college and receiving university should consult the Common Prerequisites Manual (CPM). The CPM lists the prerequisite courses and alternatives for each university degree program. Students must complete all required prerequisites to be admitted into an upper division program. (Note: Institutional general education, electives, and/or specialized coursework may be used to fulfill this requirement.)

5.1 Program of Study of at least sixty (60) college credits after the attainment of predetermined and specified performance requirements. For the articulated baccalaureate degree identified in Section 1.4, list all courses required by term. Include credit per term and total credits for the program. Please include the provided abbreviations in parentheses following each course title to indicate what courses fulfill the following requirements: foreign language (**fl**), civic literacy (**cl**), general education (**ge**) including core, electives (**elec**), baccalaureate degree program prerequisites (**pre**) as identified in the Common Prerequisites Manual, and additional courses (**saat**) beyond the 60 credits required for an associate in arts general degree. Please use the continued program plan on the next page, if needed.

The Excel spreadsheet below is set up with predefined formulas. To activate the spreadsheet, right click within the spreadsheet, go to "Worksheet Object", and then "Open". To exit, save any changes and exit out of the spreadsheet. Alternatively, double click anywhere on the table. To exit the spreadsheet, single click anywhere outside of the table.

We have begun the term-by-term plan with MAT 1033C Intermediate Algebra as that may be the math entry point for students. We included foreign language and CHM 1025C Introduction to General Chemistry to account for students who need those requirements as they were not met by high school coursework. The courses that lend themselves to the 60-83 credit hour total variable range are the Math, Science, and Foreign Language requirements. The maximum number of credits a student could potentially need to complete the SAAT in Mechanical Engineering is 83 credits which is dependent on students' starting point for science based on high school algebra completion, math placement scores, and foreign language completion in high school or via credit-by-exam.

5.1.1	Associate in Arts Specialized Degree Program of Study	
Term 1	Course Title	Credit Hours
	ENC 1101 Freshman Composition I (ge)	3
	MAT 1033C Intermediate Algebra (elec)	3
	CHM 1025C Introduction to General Chemistry (elec)	4
	Civic Literacy Social Science Core (ge; cl)	3
	EGS 1006C Introduction to the Engineering Profession (elec)	1
	Total Term Credit Hours	14
Term 2	Course Title	Credit Hours
	ENC 1102 Freshman Composition II (ge)	3
	MAC 1105 College Algebra (elec)	3
	Foreign Language Level I (fl)	4
	CHM 1045C General Chemistry I (ge)	4
	Total Term Credit Hours	14
Term 3	Course Title	Credit Hours
	Humanities Core (ge)	3
	MAC 1114 College Trigonometry (ge)	3
	MAC 1140 Precalculus Algebra (elec)	3
	Foreign Language Level II (fl)	4
	Total Term Credit Hours	13
Term 4	Course Title	Credit Hours
	SPC 1608 Speech or SPC 1017 Communication (ge)	3
	MAC 2311 Calculus I (ge)	4
	EGN 1007C Engineering Concepts and Methods (saat)	1
	Total Term Credit Hours	8
Term 5	Course Title	Credit Hours
	MAC 2312 Calculus II (ge)	4
	PHY 2048C General Physics I with Calculus (ge)	4
	COP 2220 C Programming (saat)	3
	Total Term Credit Hours	11
Term 6	Course Title	Credit Hours
	MAC 2313 Calculus III (saat)	4
	EGN 2312 Engineering Analysis - Statics (saat)	3
	PHY 2049C General Physics with Calculus II (ge)	4
	Total Term Credit Hours	11

5.1.1	Associate in Arts Specialized Degree Program of Study (Continued)	
Term 7	Course Title	Credit Hours
	EGS 2373C Principles of Electrical Engineering (saat)	3
	MAP 2302 Differential Equations (saat)	3
	EGN 2322 Engineering Analysis - Dynamics (saat)	3
	EGN 2440 Probability and Statistics for Engineers (saat)	3
	Total Term Credit Hours	12
Term 8	Course Title	Credit Hours
	Total Term Credit Hours	0
Term 9	Course Title	Credit Hours
	Total Term Credit Hours	0
Term 10	Course Title	Credit Hours
	Total Term Credit Hours	0
Term 11	Course Title	Credit Hours
	Total Term Credit Hours	0
Term 12	Course Title	Credit Hours
	Total Term Credit Hours	0
	Program Total Credit Hours:	60-83

Instructions: The completed and signed articulation agreement form, Form No. SAAT-03, must be attached to Appendix A of this completed proposal form, Form No. SAAT-02.

ARTICULATION AGREEMENT
Form No. SAAT-03
<p>6.1 The proposed specialized associate in arts transfer degree program shall articulate into the specified state university and baccalaureate degree program below. The total credit hours must include all required courses of the associate in arts specialized transfer degree program and the articulated baccalaureate degree program.</p>

SAMPLE FORM- please see the signed articulation agreement attached to this proposal.

College Name	University Name	Total Credit Hours
Enter Text Here	Enter Text Here	
Specialized AA Transfer Degree Program Name	Baccalaureate Degree Program Name	
Enter Text Here	Enter Text Here	
Specialized AA Transfer Degree Program Name	Baccalaureate Degree Program Name	
Enter Text Here	Enter Text Here	Enter Text Here

6.2 The specialized associate in arts transfer degree program shall include the following requirements. Please check the boxes below to indicate that the Program Plan in Section 5.1 includes the requirements below.

General Education Core	<input type="checkbox"/> 15 Credits
Institutional General Education	<input type="checkbox"/> 21 Credits
Electives	<input type="checkbox"/> 24 Credits
Communication and Computation	<input type="checkbox"/> 6 Credits
Foreign Language	<input type="checkbox"/> 8 Credits
Civic Literacy	<input type="checkbox"/> 3 Credits

6.3 The baccalaureate degree program shall include the following baccalaureate degree program requirements for the proposed articulation agreement between the specialized associate in arts transfer degree and the baccalaureate degree program indicated in Section 1.4.

Common Prerequisites	<p>Please list the required prerequisites and alternatives as they appear in the Common Prerequisites Manual for the articulated baccalaureate degree program.</p> <p style="color: #808080;">Enter Text Here</p>
Admission Requirements	<p>Please list academic GPA, test scores, fingerprints, health screenings, background checks, signed releases, and any other program admission requirements, if applicable.</p> <p style="color: #808080;">Enter Text Here</p>
Other Requirements	<p>Please list any other requirements that a student completing a specialized associate in arts transfer degree program may need as part of the articulated baccalaureate degree program to seamlessly transfer.</p> <p style="color: #808080;">Enter Text Here</p>

College Representative Signature Enter Text Here	University Representative Signature Enter Text Here
COLLEGE RESPONSE TO UNIVERSITY COMMENTS	
7.1 Provide comments received from any college or state university for this proposed program. The proposing college must submit a response and include any necessary supporting documentation, if applicable.	
n/a	

PROGRAM IMPLEMENTATION TIMELINE		
8.1	Indicate the date the Notice of Intent (NOI) was submitted to DFC.	12/30/24
8.2	Indicate the date the initial proposal was submitted to DFC.	07/31/25
8.3	Indicate the date the completed proposal was submitted to DFC.	00/02/25
8.4	<p>Indicate the date the proposal is targeted for State Board of Education (SBOE) consideration.</p> <p>Please note that from the date the DFC receives the finalized proposal, the Commissioner has 45 days after DFC receives a completed proposal to recommend to the SBOE approval or disapproval of the proposal. Please take into account the date you plan to submit the proposal in accordance with the next SBOE meeting.</p>	09/24/25

Appendix A

Specialized Associate in Arts Transfer Degree Articulation Agreement
(Attach Completed and Signed Articulation Agreement, Form No. SAAT-03)