

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.	Seminole State College of Florida
Institution Contact:	Carlene McNeil

RECEIVING STATE UNIVERSITY SYSTEM INSTITUTION INFORMATION

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

PROGRAM SUMMARY

1.1	Specialized associate in arts transfer degree program name.	Mechanical Engineering
1.2	Specialized associate in arts transfer degree program length (credit hours).	60-90 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 type="checkbox"/> Bachelor of Arts (BA) Please specify the program name below: Click or tap here to enter text. <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: Click or tap here to enter text.
1.5	Degree Classification of Instructional Program (CIP) code (6-Digit) of the baccalaureate degree program to which the specialized associate in arts transfer degree program articulates. CIP code refers to the taxonomic scheme developed by the U.S. Department of Education's National Center for Education Statistics .	Mechanical Engineering CIP 14.1901
1.6	Anticipated specialized associate in arts transfer degree program implementation date.	Fall 2026

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:**

The overall goal is to allow students to complete all required program prerequisites at Seminole State College such that transfer to the articulated college/university with junior status in the major may occur. This includes completing the Common Program Prerequisites and core coursework required by the major college/university for admission. The Mechanical Engineering specialization requires 30 additional course credits beyond the base 60 credits in the AA degree, bringing the total SAAT degree credits to range from 60-90.

- **Demand and unmet need of the university's 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 companies, such as Siemens Energy and Lockheed Martin, and 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 including Automation and Robotics industries which need mechanical engineers for product design, process improvement, and quality control. Mechanical engineers also 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 2025 through 2033, the total job openings for the SOCs aligned with the program CIP identified in Section 1.5 is averaged at 475 every year over the next 8 years. 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 432 which yields an unmet need of 43-99 in our region.

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

This SAAT degree includes 30 additional credits beyond the 60 credit hours allowed in a typical AA Degree. The additional credits include the following courses: EGN 1007 –Engineering Concepts and Methods (1 Credit), EGN 2312 – Engineering Analysis – Statics (3Credits), EGN 2322 – Engineering Analysis – Dynamics (3 Credits), EGN 2440 – Probability and Statistics for Engineers (3 Credits), COP 2224 – C++ Programming (3 Credits). It is notable to further explain that this degree requires MAC X311 (Analytical Geometry/Calculus I), which has a prerequisite of MAC X140 (Precalculus Algebra) and MAC X114 (Trigonometry). Students who need these prerequisites or even the prerequisites to these prerequisites would run out of credits with the AA degree when also taking the other CPPs for Engineering. An additional 8 credits are also included for students who need to satisfy the Foreign Language graduation

requirement. However, with the SAAT in Engineering (Mechanical), students will be able to take the required prerequisites for the required Math and Science within the degree.

CURRENT SSCFL Associate in Arts 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>	SPC1608	3
<i>Humanities</i>	Humanities Core	3
<i>Humanities</i>	Humanities Core/Institutional	3
<i>Mathematics</i>	MAC 2311 – Analytical Geometry/Calculus I	3
<i>Mathematics</i>	MAC 2312 – Analytical Geometry/Calculus II	3
<i>Natural Sciences</i>	Natural Science Core/Institutional (Area A or B)	3
<i>Natural Sciences</i>	CHM 2045C – General Chemistry I and Laboratory	3
<i>Social Sciences</i>	Social Science Core (Civic Literacy option)	3
<i>Social Sciences</i>	Social Science Core/Institutional	3
<i>History</i>	History (Civic Literacy option)	3
<i>24-Hour Elective Block</i>	MAC 2311 (2), MAC 2312 (2), CHM 2045C(1), PHY 2048C (4), PHY 2049C (4), MAC 2313 (4), MAP 2302 (3), EGS 1006 (1), IDS 1107 (3)	24
	Program Total	60

Coursework Beyond 60 Credits for a General Associate in Arts Degree		
Course Prefix/Number	Course Title	Credits
<i>Common Prerequisite Manual</i>	EGN 1007 – Engineering Concepts and Methods	1
<i>Common Prerequisite Manual</i>	EGN 2312 - Engineering Analysis – Statics	3
<i>Common Prerequisite Manual</i>	EGN 2322 - Engineering Analysis – Dynamics	3
<i>Common Prerequisite Manual</i>	EGN 2440 - Probability and Statistics for Engineers	3
<i>Common Prerequisite Manual</i>	COP 2224 - C++ Programming	3
Approved Electives (choose up to 17 credits from the following as needed)		
	MAC 1105 - College Algebra	3
	MAC 1114 - Trigonometry	3
	MAC 1140 - PreCalculus Algebra	3
	MAC 1147 - Precalculus Algebra/Trigonometry	5
	AER 1602 - Electrical/Electronic Systems I	4
	EGN 1111C - Engineering Graphics - Drawing	2
	ETD 1320C - Computer-Aided Design I	3
	EVR 1001 - Introduction to Environmental Science	3

GLY 1010 - Introductory Geology	3	
IND 2622 - Sustainable Design	3	
SLS 1301C - Life/Career Planning	3	
SLS 1603 - Financial Success for Students	1	
SLS 2941 - Internship Exploration	1	
SLS 2942 - Internship Exploration	2	
SLS 2949 - Internship Exploration	3	
SPN 1120 – Elementary Spanish I	4	
SPN 1121 – Elementary Spanish II	4	
SPN 2200 – Intermediate Spanish I	4	
SPN 2201 – Intermediate Spanish II	4	
FRE 1120 – Elementary French I	4	
FRE 1121 – Elementary French II	4	
ASL 1140 – American Sign Language I	4	
ASL 1150 – American Sign Language II	4	
ASL 2160 – American Sign Language III	4	
	Additional Coursework Total	30
	Program Total	60-90

By completing these extra 30 credits, students fulfill the common prerequisites required for admission to University of Central Florida (UCF). This additional coursework ensures that students are adequately prepared for upper-division architectural studies and are crucial for a smooth transition into a bachelor's program in Mechanical Engineering.

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. The Standard Occupational Classification (SOC) system is used to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. For proposed programs without a listed 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 companies, such as Siemens Energy and Lockheed Martin and 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 including Automation and Robotics industries which need mechanical engineers for product design, process improvement, and quality control. Mechanical engineers also 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 2025 through 2033, the total job openings for the SOCs aligned with the program CIP identified in Section 1.5 is averaged at 475 every year over the next 8 years. 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 432 which yields an unmet need of 43-99 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

ESTIMATES OF UNMET NEED

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.

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 years available if less than 5 years	Difference	Difference
FloridaCommerce Total	475	376	432	99	43
Other Totals				0	0

SPECIALIZED ASSOCIATE IN ARTS TRANSFER DEGREE REQUIREMENTS

4.1 In accordance with s. 1007.25(9)(b)(3), 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), F.S., 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), F.S., 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), F.S., 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.)
Communication and Computation	Pursuant to Rule 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 Competency	Pursuant to s. 1007.25(5), F.S. and Rule 6A-10.02413, F.A.C., complete a course (3 credits) and assessment to fulfill the civic literacy 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.

5.1.1	Associate in Arts Specialized Degree Program of Study	
Term 1	Course Title	Credit Hours
	ENC 1101 - English I (ge Core)	3
	IDS 1107 - First Year Experience Flightpath - Chart Your Course	3
	MAC 1105 - College Algebra (ge Core)	3
	EGS 1006 - Introduction to the Engineering Profession	1
	Social Science (ge Core/Civic Literacy Option)	3
	Total Term Credit Hours	13
Term 2	Course Title	Credit Hours
	ENC 1102 - English II (ge Inst)	3
	SPC 1608 - Speech Communication (ge Inst)	3
	MAC 1114 - Trigonometry (ge Inst)	3
	MAC 1140 - Pre-Calculus Algebra	3
	CHM 2045C - General Chemistry I (ge Core)	4
	Total Term Credit Hours	16
Term 3	Course Title	Credit Hours
	MAC 2311 - Analytic Geometry and Calculus I	5
	EGN 1007 - Engineering Concepts and Methods	1
	Natural Science A/B (ge Inst)	3
	Humanities (ge Core)	3
	History (ge Core/Inst/Civic Literacy Option)	3
	Total Term Credit Hours	15
Term 4	Course Title	Credit Hours
	MAC 2312 - Analytic Geometry and Calculus II	5
	PHY 2048C - Physics w/Calc I	4
	Humanities (ge Core/Inst)	3
	Language I	4
	Total Term Credit Hours	16
Term 5	Course Title	Credit Hours
	MAC 2313 - Analytic Geometry and Calculus III	4
	PHY 2049C - Physics w/Calculus II	4
	EGN 2312 - Engineering Analysis - Statics	3
	Language II	4
	Total Term Credit Hours	15
Term 6	Course Title	Credit Hours
	MAP 2302 - Elementary Differential Equations	3
	EGN 2322 - Engineering Analysis - Dynamics	3
	EGN 2440 - Probability Statistics for Engineers	3
	COP 2224 - C++ Programming	3
	Social Science (ge Core/Inst)	3
	Total Term Credit Hours	15
	Program Total Credit Hours:	60-90

5.1.1	Associate in Arts Specialized Degree Program of Study (Continued)	
Term 7	Course Title	Credit Hours
	Total Term Credit Hours	0
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:	0

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**

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.

College Name	University Name	Total Credit Hours
Click or tap here to enter text.	Click or tap here to enter text.	
Specialized AA Transfer Degree Program Name	Baccalaureate Degree Program Name	
Click or tap here to enter text.	Click or tap here to enter text.	
Specialized AA Transfer Degree Program Credit Hours	Baccalaureate Degree Program Credit Hours	
Click or tap here to enter text.	Click or tap here to enter text.	

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 Competency	<input type="checkbox"/> 3 credits and an assessment

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	Please list the required prerequisites and alternatives as they appear in the Common Prerequisites Manual for the articulated baccalaureate degree program. Click or tap here to enter text.
Admission Requirements	Please list academic GPA, test scores, fingerprints, health screenings, background checks, signed releases, and any other program admission requirements, if applicable. Click or tap here to enter text.
Other Requirements	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. Click or tap here to enter text.

College Representative Signature Click or tap here to enter text.	University Representative Signature Click or tap here to enter text.
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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.

- Comments Received:
N/A

- College Response:
Click or tap here to enter text.

PROGRAM IMPLEMENTATION TIMELINE

8.1	Indicate the date the Notice of Intent (NOI) was submitted to DFC.	7/23/2025
8.2	Indicate the date the initial proposal was submitted to DFC.	12/17/2025
8.3	Indicate the date the completed proposal was submitted to DFC.	1/21/2026
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>	2/20/2026

Appendix A

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