#### **VALENCIA COLLEGE**

#### **UNIVERSITY OF CENTRAL FLORIDA**

# ASSOCIATE IN SCIENCE (A.S.) IN STEM - COMPUTER SCIENCE AT VALENCIA COLLEGE TO BACHELOR OF SCIENCE (B.S.) DEGREE IN COMPUTER SCIENCE AT UCF

## **INTRODUCTION**

The Computer Science Articulated Program (the Program) is an articulation agreement designed to enhance advising and facilitate efficient transfer of Valencia Students who have completed STEM Associate in Science (AS) Degree, with a specialization in Computer Science to University of Central Florida's (UCF) Bachelor of Science in Computer Science. Valencia students who complete the A.S. STEM Degree and the appropriate Common Program Prerequisites will be accepted into the upper division in the Computer Science major upon admission to the University of Central Florida.

## A.S. STEM Pathway with Specialization in Computer Science, Valencia College

Valencia students who participate in this Program, will

- a. select the A.S. STEM Pathway with Specialization in Computer Science by consulting with a Valencia advisor.
- b. seek advisement from a qualified advisor for the A.S. STEM each semester before registering for classes,
- c. take appropriate prerequisites for required courses as determined by placement tests,
- d. complete 36 hours of general education credits, additional pre-requisites, and common program prerequisites, and
- e. attain a minimum Cumulative Grade Point Average (2.0) and complete the A.S. STEM program of study, and graduate from Valencia with the Articulated A.S. STEM degree.

#### **VALENCIA A.S. STEM REQUIREMENTS**

Students will complete the A.S. STEM requirements with specialization in Computer Science, as described in the current Valencia catalog, including the thirty-six hours of General Education Program requirements and the Common Program Prerequisites for the Computer Science B.S. at UCF.

General Education Program Requirements (as identified in the current Valencia catalog)

Communications Humanities Social Science Mathematics<sup>1</sup> Science<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Students must take MAC 2311 and MAC 2312 to meet the Common Program Prerequisite requirements. Additional prerequisites to these courses, including MAC 1105, MAC 1114, and MAC 1140, may be required depending on the student's placement in mathematics courses.

<sup>&</sup>lt;sup>2</sup> Acceptable science courses include: BSC IOIOC Biology I, BSC IOI IC Biology II, CHM 1045C General Chemistry I, CHM I 046 General Chemistry II. Select two (2) courses.

## Common Program Prerequisites (required for the Computer Science major at UCF)

COP 2220C Programming
MAC 2311 Calculus I
MAC 2312 Calculus II
PHY 2048C Physics I and Lab
PHY 2049C Physics II and Lab

Two science courses for science majors, prefixes BSC, CHM<sup>3</sup>

## **Additional Prerequisites**

COP 2800 Java Programming

COP 2805 Advanced Java Programming

**Electives** (consult an advisor for appropriate recommendations)

**Foreign Language Requirement**: Students who have not completed two (2) years of the same foreign language in high school, must complete two (2) semesters of a foreign language before graduating from Valencia

## **Total Credit Hours Required**

64 hours

## Bachelor of Science (B.S.) in Computer Science at University of Central Florida

#### **UCF B.S. REQUIREMENTS**

To earn a UCF Computer Science Bachelor of Science through this program, students must meet all the graduation requirements listed in the UCF Undergraduate Catalog for the appropriate catalog year.

**General Education Program Requirement** (completed as part of the A.S. STEM Degree at Valencia College)

**Common Program Prerequisites** (completed to fulfill requirements of the A.S. STEM Degree at Valencia College)

## **Acceptance of Computer Science Courses taken at Valencia**

Three Computer Science courses are taken as part of the A.S. STEM with specialization in Computer Science:

COP 2220	C Programming	3 hours
COP 2800	Java Programming	3 hours
COP 2805	Advanced Java Programming	3 hours

These courses will be accepted in transfer by the UCF College of Engineering and Computer Science and substitute for the following UCF courses:

COP 3223	Introduction to Programming with C	3 hours

<sup>&</sup>lt;sup>3</sup> Acceptable science courses include: BSC IOIOC Biology I, BSC IOI IC Biology II, CHM 1045C General Chemistry I, CHM I 046 General Chemistry II. Select two (2) courses

COP 3330 Object Oriented Programming 3 hours

## Core Requirements: Basic Level Total 30 hours

A "C" or better is required in all courses in this area.

COP 3502C	Computer Science I	3 hours
COP 3503C	Computer Science II	3 hours
STA 2023	Statistical Methods I	3 hours
ENC 3241	Writing for the Technical Professional	3 hours
CDA 3103	Computer Logic and Organization	3 hours
COT 3100C	Introduction to Discrete Structures	3 hours
CIS 3360	Security in Computing	3 hours
COP 3402	Systems Software	3 hours
COP 4331C	Processes for Object Oriented Software Development	3 hours
COT 4210	Discrete Structures II	3 hours
COT 3960	Foundation Exam (PR: COP 3502C)	0 hours

## **Core Requirements: Advanced Level**

**Total 18 hours** 

Students must maintain at least a 2.5 GPA in these courses; only the highest grade is used in the calculation. Students should consult the UCF catalog or the Computer Science website for a list of approved courses.

## Capstone Requirement Total 6 hours

A "C" or better is required in all courses in this area

COP 4934 Senior Design 1 3 hours

COP 4935 Senior Design 2 3 hours

## **Math/Statistics Restricted Electives**

A "C" or better is required in all courses in this area

**Total 6 hours** 

4000-5000 level Mathematics or Statistics courses

Courses from: STA, MAP, MAA, MAD, MAS prefixes- includes MAC 2313, MAP 2302, MAS 3105, and MAS 3106.

No independent study hours, internship, or cooperative education hours are allowed.

## Total Credit Hours Required

60 hours

## TOTAL CREDITS HOURS REQUIRED FOR B.S. DEGREE

120 hours

## **UCF Graduation Requirements**

- A. College/School Exit Requirements
  - Students must complete an exit survey

- Computer competency is met by completion of the major
- Residency requirement: at least 24 semester hours of regularly scheduled 3000 5000 level courses taken from Computer Science at UCF
- 18 of the 24 residency hours must be at the 4000-5000 level
- B. University Minimum Exit Requirements
  - 2.0 UCF GPA
  - 60 semester hours earned after CLEP awarded
  - 42 semester hours of upper division credit completed
  - 30 of the last 39 hours of course work must be completed in residency at UCF
  - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
  - Complete the General Education Program, the Gordon Rule, the CLAS 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 in Arts degree at Valencia as described herein and maintained a 2.0 GPA will be accepted into the upper division in the UCF College of Engineering and Computer Science after being admitted to the University. To be admitted to the Advanced Core, students must take and pass COT 3960 Foundation Exam (prerequisite: COP 3502C).

## **Foreign Language Requirements**

#### A. Admission

Students who have not completed two units of the same foreign language or American Sign Language in high school must complete a minimum of eight semester hours of college level foreign language or demonstrate proficiency at VCC; Valencia students must meet this requirement to earn their A.A.

## **B.** Graduation

Students must complete a proficiency exam in a second language, one semester of college level foreign language, or three (3) credits of multi-cultural courses approved by Computer Science.

## **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. Additionally, students must provide documentation of vaccinations against Meningitis and Hepatitis B or decline the vaccinations by signing a separate waiver acknowledging receipt and review of information provided by UCF Health Services.

## 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, nor 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 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 Valencia College of such fact and of such portions of this Agreement that may be deemed terminated due to failure of appropriations

## **Modifications or Updates**

Any amendments to this agreement shall not be valid unless made in writing and signed by both parties. This agreement is subject to change by legislative action, the Department of Education, the Florida Board of Governors, the University of Central Florida or its Board of Trustees, Valencia 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.

#### **Notifications**

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, Academic Affairs

Michael Georgiopoulos, Dean, College of Engineering and Computer Sciences

Theodorea R Berry, Vice Provost for Student Learning and Academic Success, Dean, College of Undergraduate Studies

Manoj Chopra, Associate Dean, Academic Affairs, College of Engineering and Computer Sciences Harrison Oonge, Assistant Dean, Academic Planning, College of Undergraduate Studies

## Valencia College

Isis Artze-Vega, Provost and Vice President, Academic Affairs
Nasser Hedayat, Assistant Vice President, Career and Workforce Education
Paul Wilder, Dean, Engineering, Computer Programming and Technology
Cheryl Robinson, Director, Curriculum and Articulation

#### **TERM**

This agreement shall take effect on August 1, 2022, or the date of the last signature below, whichever is later and shall remain in effect for a five-year term. Upon the end of the five-year term, the agreement shall be eligible for renewal for additional five years following a review by the Parties. Either party may terminate or suspend this Agreement at any time for convenience upon sixty (60) days' written notice; provided, however, that the Parties shall discuss and reasonably attempt to resolve issues that led to notice of termination or suspension during the sixty (60) day period.

#### **APPROVALS**

University of Central Florida		Valencia College		
Michael Johnson	Date	Kathleen Plinske	Date	
Provost & Executive Vice President Academic Affairs	.,	President		