



# 2+2 Degree Plan Checklist

## Associate of Science in Technology and Engineering Bachelor of Science in Computer Science



### Pulaski Technical College Associate of Science in Technology and Engineering<sup>1</sup>

Possible Prerequisites			UCA <sup>2</sup>	Semester	Hours	Grade
DEVE	0314	Reading Improvement			N/C	
DEVE	0316	College Reading			N/C	
DEVE	0322	English Skills			N/C	
DEVE	0324	English Composition Fundamentals			N/C	
DEVE	0334	Pre-Algebra Skills			N/C	
DEVE	0336	Elementary Algebra			N/C	
DEVE	0338	Intermediate Algebra			N/C	

#### General Education Requirements (35 credit hours)

English (6 credit hours)			UCA <sup>2</sup>	Semester	Hours	Grade
ENGL	1311	English Composition I	WRTG 1310		3	
ENGL	1312	English Composition II	WRTG 1320		3	

Mathematics (3 credit hours)			UCA	Semester	Hours	Grade
MATH	1302	College Algebra	MATH 1390		3	

Sciences (8 credit hours)			UCA	Semester	Hours	Grade
BIOL	1401	Biological Science with Lab	BIOL 1440		4	
CHEM	1405	General Chemistry I or	CHEM 1450		4	
PHYS	1402	College Physics I	PHYS 1410			

Fine Arts/Humanities (6 credit hours)			UCA	Semester	Hours	Grade
ARTS	2300	Introduction to Visual Arts or	ART 2300		3	
MUSC	2300	Introduction to Music or	MUS 2300			
THEA	2300	Introduction to Theatre	THEA 2300			
ENGL	2337	World Literature from the Beginning to 1650 or	ENGL 2305		3	
ENGL	2338	World Literature from 1650 to the Present	ENGL 2306			

Social Sciences (6 credit hours)			UCA	Semester	Hours	Grade
HIST	2311	U.S. History to 1877 or	HIST 2301		3	
HIST	2312	U.S. History since 1877 or	HIST 2302			
POLS	1310	American National Government	PSCI 1330			
HIST	1311	History of Civilization I or	HIST 1310		3	
HIST	1312	History of Civilization II	HIST 1320			

Social Sciences/Oral Communications (6 credit hours)			UCA	Semester	Hours	Grade
ECON	2322	Principles of Microeconomics or	ECON 2321		3	
ECON	2323	Principles of Macroeconomics or	ECON 2320			
PSYC	2300	Psychology and the Human Experience or	PSYC 1300			
SOCI	2300	Introduction to Sociology	SOC 1300			
SPCH	1300	Speech Communication	COMM 1300		3	

#### Computer Science Foundation (25 credit hours)

			UCA	Semester	Hours	Grade
CIS	2514	Introduction to Computer Science I	CSCI 1470		4	
CIS	2644	Introduction to Computer Science II	CSCI 1480		4	
CIS	2653	Computer Organization and Assembly Language	CSCI 2440		3	
CIS	2733	Data Structures	CSCI 2320		3	
MATH	1303	Trigonometry	MATH 1392		3	
MATH	1404	Calculus I	MATH 1496		4	
MATH	2320	Introduction to Statistics and Probability	MATH 2311		3	
		General Elective			1	

**Total Hours: 60<sup>3</sup>**



## 2+2 Degree Plan Checklist

### Associate of Science in Technology and Engineering Bachelor of Science in Computer Science



### University of Central Arkansas Bachelor of Science in Computer Science UCA Courses (60 credit hours)<sup>4</sup>

			Semester	Hours	Grade
BIOL	1441	Principles of Biology II or			
CHEM	1451	College Chemistry II or		4	
PHYS	1420	College Physics 2 <sup>5</sup>			
CSCI	3190	Social Implications of Technology		1	
CSCI	3330	Algorithms		3	
CSCI	3360	Database Systems		3	
CSCI	3370	Principles of Programming Languages		3	
CSCI	3380	Computer Architecture		3	
CSCI	3381	Object Oriented Programming Languages		3	
CSCI	4191	Seminar		1	
CSCI	4300	Operating Systems		3	
CSCI	4490	Software Engineering		4	
		<b>Choose at least 9 credit hours:</b>			
CSCI	3335	Networking			
CSCI	3345	Human-Computer Interaction			
CSCI	3350	File Structures			
CSCI	3375	Internship in Computer Science			
CSCI	3385	Artificial Intelligence			
CSCI	4195	Independent Study			
CSCI	4295	Independent Study			
CSCI	4395	Undergraduate Research			
CSCI	4310	Introduction to Scientific Computing		9	
CSCI	4315	Information Security			
CSCI	4320	Compiler Construction			
CSCI	4340	Introduction to Parallel Programming			
CSCI	4350	Computer Graphics			
CSCI	4353	Introduction to Multimedia Computing			
CSCI	4355	Distributed Object Computing			
CSCI	4360	Special Topics in Computer Science			
CSCI	4365	Web Technology			
CSCI	4370	Data Mining			
CSCI	4390	Theory of Computation			
MATH	2330	Discrete Structures I		3	
MATH	3311	Statistical Methods II		3	
MATH	3320	Linear Algebra		3	
MATH	3330	Discrete Structures II		3	
		General Electives		11	

**Total Hours: 120<sup>6</sup>**

<sup>1</sup> See your PTC advisor for degree and graduation information.

<sup>2</sup> UCA transfer course designations are either guaranteed by ACTS (acts.adhe.edu) or have been approved as a substitution by UCA. Unless otherwise noted, courses for which no UCA equivalent course is listed would transfer in as elective credit.

<sup>3</sup> Students completing the AS in Technology and Engineering degree requirements, as shown above, with a minimum 2.0 cumulative GPA, will have satisfied the UCA Lower-Division Core requirements and will be admitted to the BS in Computer Science degree program as a junior.

<sup>4</sup> For more specific information about degree requirements within the junior and senior years at UCA, please review the UCA Undergraduate Bulletin (<http://uca.edu/ubulletin>) and consult your UCA academic advisor.

<sup>5</sup> This course must complete a lab science sequence begun at PTC (i.e. if CHEM 1405 was taken at PTC, the student can choose CHEM 1451 at UCA; if PHYS 1402 was taken at PTC, the student can choose PHYS 1420 at UCA to complete the sequence). BIOL 1441 would complete the required sequence as well.

<sup>6</sup> This degree program requires a total of 120 semester credit hours, including at least 40 upper-division credit hours completed at UCA.