American River College ~ Computer Information Science **A.S. CIS: Computer Programming** Course check off sheet Semester Completed **Required Program** CISC 310 Introduction to Computer Information Science CISP 350 **Database Programming** Subtotal Units: C++ concentration [CISP Algorithm Design/Problem Solving (3) 300 and CISP 360 Introduction to Structured Programming (4)] or CISP 480 Honors Introduction to Structured Programming (5) CISP 400 Object Oriented Programming with C++ CISP 430 Data Structures C++ concentration Units: **Total Units:** Java concentration [CISP 300 Algorithm Design/Problem Solving (3) and CISP 360 Introduction to Structured Programming (4) or CISP 480 Honors Introduction to Structured Programming (5) CISP **Object Oriented Programming with Java** 401 A minimum of 3 units from the following: CISC 320 Operating Systems (1) CISC 323 Linux Operating System (1) CISC 324 Intermediate Linux Operating System (1) CISP 310 Assembly Language Programming for Microcomputers (4) CISP 362 Programming for Mobile Devices I (4) CISP 363 Programming for Mobile Devices II (4) Java concentration Units:

3

3

6

5 - 7

4

4

13 - 15

19 - 21

5 - 7

4

3

12 - 14

20

Total Ur	its:		18 - 20
Visual Basic concentration			
CISA	322	Design and Development of Desktop Database Applications	3
CISP	300	Algorithm Design/Problem Solving	3
CISP	370	Beginning Visual Basic	4
CISP	371	Intermediate Visual Basic	4
			14
Visual B	Visual Basic concentration Units:		

Total Units:

The Computer Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Notes: