B.S.C.S. SAMPLE PROGRAMS

The following information has unofficial approval of the **Department of Computer Science**, but is intended only as a guide. Official degree requirements are established at the time of transfer and admission to the **Buchtel College of Arts and Sciences**. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.* The transfer process is completed through an appointment with your academic advisor.

Italicized courses fulfill Honors Distribution requirements. Unless a course is specified, refer to the Honors College Contract Form at

http://www.uakron.edu/honors/curriculum/honors-distribution.dot.

COMPUTER SCIENCE 346004BS
BACHELOR OF SCIENCE IN COMPUTER SCIENCE – SYSTEM TRACK

Description: This option is designed for flexibility, allowing customization of the necessary courses depending on student interests.

First Year Fall Semester		Credit Hrs.	Prerequisites
	Honors English Composition I Requirement	4	Appropriate placement by advisor.
	Beginning Language I[1] **-OR-**	4 **or**	
7700:101	American Sign Language I[1]	3	
3450:208	*Introduction to Discrete Mathematics[2]	4	3450:145 or 3450:149 with a C- or better or equivalent.
3460:209	*Computer Science I	4	3450:145 or 3450:149 with a C- or better or equivalent.
	Physical Education/Wellness Requirement	1	
	Total	**16-17**	

[1] Completion of the second year of a foreign language or sign language is required. French, Spanish, German, Japanese and Russian are the recommended choices for fulfilling the Foreign Language requirement; other languages are possible. See your advisor for placement. Sign Language is also permitted. Please note that all four semesters must be completed in the *same* language.

[2] A continuing student who has not already completed Computer Science I (3460:209) should take Discrete Mathematics (3450:208) first or as a corequisite. The correct mathematics sequence is as follows:

3450:208	Discrete Mathematics
(*3450:149	Precalculus may be required per placement test results.)
3450:221	Analytic Geometry – Calculus I
3450:222	Analytic Geometry – Calculus II

First Year Spring Semester		Credit Hrs.	Prerequisites
	Honors English Composition II Requirement	3	3300:111 or equivalent
	Beginning Language II	4	Beginning Language I
	-OR-	**or**	**or**
7700:102	American Sign Language II	3	7700:101
3460:210	*Computer Science II	3	3450:208 and 3460:209 with grades of C- or better
3450:221	**Analytic Geometry – Calculus I*	4	3450:149 with a C- or better or equivalent
	Honors Distribution Requirement	3-4	
	Total	**16-18**	

*** PREADMISSION REQUIREMENT** – must be completed **with grades of C or better** prior to applying for admission into the Computer Science program.

Second Year Fall Semester		Credit Hrs	Prerequisites
3450:222	Analytic Geometry – Calculus II	4	3450:221 with a C- or better
3460:421	Object-Oriented Programming	3	3460:210 with a C- or better
	Intermediate Language I	3	Beginning Language II
	-OR-		**or**
7700:201	American Sign Language III		7700:102
	Free Elective	3-4	
	Honors Distribution Requirement	3-4	
	Total	**16-18**	

POLICY ALERT: By the end of your first 48 credit hours attempted you must have

- Completed your General Education English, Math and Communications (Speech) requirements; and
- Declared a major and transferred to (been accepted by) a degree granting college at The University of Akron.

Second Year Spring Semester		Credit Hrs	Prerequisites
	Intermediate Language II	3	Beginning Language II
	-OR-	**or**	**or**
7700:202	American Sign Language IV	3	7700:201
	AND	+	
7700:222	Survey of Deaf Culture in America	2	Sign language students only
4450:320	Computer Systems	3	3460:209 or 4450:208, and 3450:208 or 4450:220
3460:316	Data Structures	3	3460:210 and 3450:221 or 3450:215 with grades of C- or better
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
	Honors Distribution Requirement	3-4	
	Total	**15-18**	

[3] Electives in areas related to Computer Science may include courses from Engineering, Physics or Business.

Third Year Fall Semester		Credit Hrs	Prerequisites
1870:xxx	Honors Colloquium	2	
	Honors Distribution Requirement	3-4	
3470:461	Applied Statistics	4	3470:222 or equivalent
or	**-OR-**		
3470:401	Probability and Statistics for Engineers	2	3470:222 or equivalent
3460:426	Operating Systems	3	3460:210 and 3450:306 or 4450:320 or equivalent with grades of C- or better
or	**-OR-**		**or**
4450:325	Operating Systems Concepts		4450:320 and 3460:210
3460:307	Internet Systems Programming	3	3460:210 with a C- or better
	Total	**13-16**	

Third Year Spring Semester		Credit Hrs	Prerequisites
	Honors Distribution Requirement	3-4	
	Honors Distribution Requirement	3-4	
3460:480	Software Engineering	3	3460:210 with a C- or better
3460:497	Individual Reading in Computer Science	1-3	
1870:xxx	Honors Colloquium	2	
	Total	**12-16**	

POLICY ALERT: The C.S. Department does not require students to register for and take 3460:497. However, if you choose not to, you will have to elect another 3460:4xx class. Only the *combination* of 3460:497 and 3460:498 will count as an elective in the c.s. major.

Fourth Year Fall Semester		Credit Hrs	Prerequisites
	Honors Distribution Requirement	3-4	
3460:435	Algorithms	3	3460:316 with a C- or better
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
1870:xxx	Honors Colloquium	2	
3460:498	Senior Honors Project	2	
	Total	**16-17**	

Fourth Year Spring Semester		Credit Hrs	Prerequisites
3460:490	Senior Seminar in Computer Science	3	At least 30 hours of C.S. courses.
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
xxxx:3/4xx	Elective in C.S. or a related field[3]	3	
3460:498	Senior Honors Project	2	
	Free Electives	1-3	
	Total	**15-17**	

Total Credits for Degree	**128 min**	

COMPUTER SCIENCE 346006BS
BACHELOR OF SCIENCE IN COMPUTER SCIENCE – MANAGEMENT TRACK

Description: This option is tailored to learning about designing and developing systems for business information management.

First Year Fall Semester		Credit Hrs.	Prerequisites
	Honors English Composition I Requirement	4	Appropriate placement by advisor.
	Beginning Language I[4] **-OR-**	4 **or**	
7700:101	American Sign Language I[4]	3	
3450:208	*Introduction to Discrete Mathematics[5]	4	3450:145 or 3450:149 with a C- or better or equivalent.
3460:209	*Computer Science I	4	3450:145 or 3450:149 with a C- or better or equivalent.
	Total	**15-16**	

First Year Spring Semester		Credit Hrs.	Prerequisites
	Honors English Composition II Requirement	3	3300:111 or equivalent
	Beginning Language II **-OR-**	4 **or**	Beginning Language I **or**
7700:102	American Sign Language II	3	7700:101
3460:210	*Computer Science II	3	3450:208 and 3460:209 with grades of C- or better
3450:221	**Analytic Geometry – Calculus I*	4	3450:149 with a C- or better or equivalent
	Physical Education/Wellness Requirement	1	
	Total	**14-15**	

*** PREADMISSION REQUIREMENT** – must be completed **with grades of C or better** prior to applying for admission into the Computer Science program.

[4] Completion of the second year of a foreign language or sign language is required. French, Spanish, German, Japanese and Russian are the recommended choices for fulfilling the Foreign Language requirement; other languages are possible. See your advisor for placement. Sign Language is also permitted. Please note that all four semesters must be completed in the *same* language.

[5] A continuing student who has not already completed Computer Science I (3460:209) should take Discrete Mathematics (3450:208) first or as a corequisite. The correct mathematics sequence is as follows:

3450:208	Discrete Mathematics
(*3450:149	Precalculus may be required per placement test results.)
3450:221	Analytic Geometry – Calculus I
3450:222	Analytic Geometry – Calculus II

Second Year Fall Semester		Credit Hrs	Prerequisites
3450:222	Analytic Geometry – Calculus II	4	3450:221 with a C- or better
3460:475	Database Management	3	3460:210 with a C- or better
7700:201	Intermediate Language I **-OR-** American Sign Language III	3	Beginning Language II **or** 7700:102
	Free Elective	3-4	
	Honors Distribution Requirement	3-4	
	Total	**16-18**	

POLICY ALERT: By the end of your first 48 credit hours attempted you must have

- Completed your General Education English, Math and Communications (Speech) requirements; and
- Declared a major and transferred to (been accepted by) a degree granting college at The University of Akron.

Second Year Spring Semester		Credit Hrs	Prerequisites
7700:202 7700:222	Intermediate Language II **-OR-** American Sign Language IV **AND** Survey of Deaf Culture in America	3 **or** 3 + 2	Beginning Language II **or** 7700:201 Sign language students only
4450:320	Computer Systems	3	3460:209 or 4450:208, and 3450:208 or 4450:220
3460:316	Data Structures	3	3460:210 and 3450:221 or 3450:215 with grades of C- or better
xxxx:3/4xx	Elective in C.S. or a related field[6]	3	
	Honors Distribution Requirement	3-4	
	Total	**15-18**	

Third Year Fall Semester		Credit Hrs	Prerequisites
1870:xxx	Honors Colloquium	2	
	Honors Distribution Requirement	3-4	
3470:461 **or** 3470:401	Applied Statistics **-OR-** Probability and Statistics for Engineers	4 2	3470:222 or equivalent 3470:222 or equivalent
3460:426 **or** 4450:325	Operating Systems **-OR-** Operating Systems Concepts	3	3460:210 and 3450:306 or 4450:320 or equivalent with grades of C- or better **or** 4450:320 and 3460:210
6500:310	Business Information Systems	3	48 credit hours and 6200:250 or equivalent
	Total	**13-16**	

[6] Electives in areas related to Computer Science may include courses from Engineering, Physics or Business.

Third Year Spring Semester		Credit Hrs	Prerequisites
	Honors Distribution Requirement	3-4	
3460:480	Software Engineering	3	3460:210 with a C- or better
6500:301 **or** 6500:480	Management Principles and Concepts **-OR-** Introduction to Health-Care Management	3	Admitted into a degree-granting college, 48 credit hours Admitted into a degree-granting college, upper-college standing
	Honors Distribution Requirement	3-4	
3460:497	Individual Reading in Computer Science	1-3	
1870:xxx	Honors Colloquium	2	
	Total	**15-19**	

POLICY ALERT: The C.S. Department does not require students to register for and take 3460:497. However, if you choose not to, you will have to elect another 3460:4xx class. Only the *combination* of 3460:497 and 3460:498 will count as an elective in the c.s. major.

Fourth Year Fall Semester		Credit Hrs	Prerequisites
	Honors Distribution Requirement	3-4	
3460:435	Algorithms	3	3460:316 with a C- or better
xxxx:3/4xx	Elective in C.S. or a related field[6]	3	
	Honors Distribution Requirement	3-4	
1870:xxx	Honors Colloquium	2	
3460:498	Senior Honors Project	2	
	Total	**16-18**	

Fourth Year Spring Semester		Credit Hrs	Prerequisites
3460:490	Senior Seminar in Computer Science	3	At least 30 hours of C.S. courses.
xxxx:3/4xx	Elective in C.S. or a related field[6]	3	
xxxx:3/4xx	Elective in C.S. or a related field[6]	3	
3460:498	Senior Honors Project	2	
	Free Electives	1-5	
	Total	**12-16**	

Total Credits for Degree	**128 min**	