

Computer Information Systems

Programming Option, Bachelor of Science Degree (244302BS)

The following information has official approval of The University of Akron's College of Applied Science and Technology but is intended only as a guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. 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, and prerequisites, among others. The transfer process is completed through an appointment with your Academic Advisor.

CIS core courses are in **bold** type. Business core courses are in regular type. General Education requirements are in *italics*. All other courses are in **bold italic** type. If a course is not specified, refer to the General Education webpage at <http://www.uakron.edu/cast/gened>. The College of Applied Science and Technology recommends that students take the General Education courses listed in this curriculum guide. Transfer students should consult their Advisor to identify courses that are equivalent.

Year 1 Fall	Prerequisite
2020:121 <i>English 3</i>	<i>Placement by Advisor</i>
2030:152 <i>Technical Mathematics II (2) -AND- 2030:153 Technical Mathematics III (2)</i>	<i>Placement by Advisor 2030:152 (with C- or better)</i>
2420:104 Introduction to Business in Global Environment (3)	
2440:121 Introduction to Logic/Programming (3)	2440:105 or placement test
2440:140 Internet Tools (3)	2440:105 or placement test
Total Credits = 16	

Year 1 Spring	Prerequisite
2020:222 <i>Technical Report Writing (3)</i>	<i>2020:121 or equivalent</i>
2420:103 Essentials of Management Technology (3)	
2440:145 Introduction to Unix/Linux (3)	2440:105 or placement test
2440:170 Visual Basic (3) (Note b)	2440:121
2440:180 Intro to Database Management (3) (Note b)	2440:121
Total Credits = 15	

Year 2 Fall	Prerequisite
2420:263 <i>Professional Communications and Presentations (3)</i>	
2420:211 Basic Accounting I (3)	
2440:210 Client/Server Programming (3) (Note a)	2440:180
2440:241 Systems Analysis and Design (3) (Note a)	2440:160/170/256 and 2440:180
2440:256 C++ Programming (3) (Note a)	2440:121
Total Credits = 15	

Year 2 Spring	Prerequisite
2040:247 <i>Survey of Basic Economics (3)</i> <i>Fulfills Critical Thinking Tag</i>	
2420:202 Elements of Human Resource Management (3)	2420:103 or permission
2420:212 Basic Accounting II (3) -OR- 2420:243 Survey of Finance (3)	2420:211 2420:170 & 2420:211 or permission
2440:160 JAVA Programming (3) (Note b)	2440:121
2440:240 CIS Internship (3) (Note b)	2440:241, or (2440:202 & 2440:247), or (2440:282 & 2440:247)
Total Credits = 15	

Year 3 Fall	Prerequisite
2040:240 <i>Human Relations (3)</i>	
3400:210 <i>Humanities in the Western Tradition I (4)</i> -OR- 3400:221 <i>Humanities in the World Since 1300 (4)</i> <i>Fulfills Critical Thinking Tag</i>	<i>32 credits and completion of 3300:112 or 3300:114 or 2020:222 or permission</i>
2030:154 Technical Mathematics IV (3)	2030:153
2440:xxx CIS Elective (3)	See Advisor
2440:360 JAVA Programming II (3) (Note a)	2440:160
Total Credits = 16	

Year 3 Spring	Prerequisite
7100:210 <i>Visual Arts Awareness (3)</i> -OR- 7500:201 <i>Exploring Music, Bach to Rock (3)</i> -OR- 7900:200 <i>Viewing Dance (3)</i> -OR- <i>Arts Requirement (3) (Note d)</i>	<i>3400:210 or 3400:221 3400:210 or 3400:221 3400:210 or 3400:221</i>
<i>Natural Science Requirement with Lab (4)</i>	
2030:345 Technical Data Analysis (2)	2030:154 (with C- or better)
2440:306 Ethics and Law in IT (3) (Note b)	Junior/Senior standing
2440:456 C++ Programming II (3) (Note b)	2440:256
Total Credits = 15	

Year 4 Fall	Prerequisite
3300:252 <i>Shakespeare and His World (3)</i> -OR- 3600:101 <i>Introduction to Philosophy (3)</i> -OR- <i>Arts or Humanities Requirement (3) (Note d)</i>	<i>For 3300:252 only: 3300:111 and 3300:112 or their equivalents (2020:121 and 2020:222), and 3400:210 or 3400:221</i>
2040:244 <i>Death and Dying (3)</i> -OR- 2040:254 <i>Black Experience 1619-1877 (2)</i> -OR- 2040:256 <i>Diversity in American Society (3)</i> -OR- 2040:257 <i>Black Experience 1877-1954 (2)</i> -OR- 2040:258 <i>Black Experience 1954-Present (2)</i> <i>Each Course Fulfills Domestic Diversity Tag</i>	<i>2020:121 or 3300:112 2020:121 or 3300:112 or equivalent 2020:121 or 3300:112 2020:121 or 3300:112</i>
3450:208 Introduction to Discrete Mathematics (4)	3450:145 or 3450:149 or placement test or permission
2440:465 Data Communications and Networking (3) (Note a)	Junior/Senior standing
2440:470 Database Management II (3) (Note a)	2440:180
Total Credits = 15-16	

Year 4 Spring	Prerequisite
2040:243 <i>Contemporary Global Issues (3)</i> <i>Fulfills Global Diversity Tag</i>	
<i>Natural Science Requirement without Lab (3)</i>	
<i>Complex Systems Tag Requirement (3)</i>	
2440:450 Applied Data Mining (3) (Note b)	2030:345
2440:451 CIS Senior Programming Projects (3) (Note b)	Senior standing
Total Credits = 15	

Total Credits for Degree = 122 minimum

Policy Alert: By the end of your first 48 credit hours attempted, you must have completed your REQUIRED General Education English, Mathematics, and Communications (Speech) requirements.

You must have a minimum cumulative GPA of a 2.0 to graduate with this degree.

Department of Business and Information Technology Policy Notes

- Students must attain a "C" or better in each course in their major area (2440).
- The Department of Business and Information Technology requires a cumulative GPA of 2.0 GPA and a minimum of 15 earned credit hours for Inter- and Intra-College Transfer into all Associate and Bachelor's degree programs.

Notes

- a) Traditionally Fall Only (See Program Contact)
- b) Traditionally Spring Only (See Program Contact)
- c) Prior to enrolling in classes for the B.S. degree you must contact an advisor in Polsky 301
- d) Course must be part of the Ohio Transfer Module.

CIS Electives

The CIS Elective may be chosen from the following list:

- 2440:321; Server-Side Scripting; (3 credits); (prerequisite = 2440:121 & 2440:140),
- 2440:370; Visual Basic Programming II; (3 credits); (prerequisite = 2440:170),
- 2440:388; Advanced UNIX/Linux; (3 credits); (prerequisite = 2440:145),
- 2440:480; Current Topics in Computer Information Systems; (3 credits).

The CIS electives may be registered after taking the necessary prerequisite(s) or by permission from the CIS program.

BS CIS – Programming Option (Total Credits)

- General Education (44-45/122-123) = 36%
- Business Core (24/122-123) = 20%
- CIS (54/122-123) = 44%

Program Contacts

- Dr. Zarreen Farooqi (zarreen@uakron.edu), 330-972-8858
- Enoch Damson (damson@uakron.edu), 330-972-7162
- CAST Advising, Polsky Building Room 203, 330-972-7220

Program Description

The CIS discipline or program area offers associate and baccalaureate programs that introduce students to basic computing concepts while allowing them to develop the basic skills required to begin a career. Courses start the student along the path for professional certifications. There are options, minors, and certificates available. CIS courses are taught in cutting edge computer labs so students can learn and practice skills. Schedules offer a range of day and evening classes.

Career Information

Graduates of the **AAB/BS CIS – Programming** program are expected to qualify for such positions as developer/programmer analysts, software developers, database developers/designers, database administrators, and database warehouse analysts in government, business, information technology, and other industries.

For additional information, please visit the Bureau of Labor Statistics www.bls.gov or visit the Career Center in Simmons Hall, Room 301, <http://www.uakron.edu/career/>

Transfer to the College of Applied Science and Technology

To be admitted to the College of Applied Science and Technology, a student must have a GPA of 2.0. A student can complete the transfer process through an appointment with an Academic Advisor in the college in which they reside.