

# College of Applied Science and Technology

## COMPUTER INFORMATION SYSTEMS (244302BS)

### Programming Option

Bachelor of Science Degree

The following information has official approval of the **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, prerequisites, among others.*

Course in **bold** are core CIS courses, non-bold, non-italicized courses are non-CIS core courses.

*Italicized* courses fulfill General Education requirements. Unless a course is specified, refer to the General Education guide at [http://www.uakron.edu/advising/docs/General\\_Education\\_Guide.pdf](http://www.uakron.edu/advising/docs/General_Education_Guide.pdf).

1 <sup>st</sup> Year		Fall Semester		Credit Hours	Prerequisites
2020:121	<i>English</i>			3	Placement by Advisor
2030:152	<i>Technical Mathematics II -AND-</i>			2	<i>Placement by Advisor</i>
2030:153	<i>Technical Mathematics III</i>			2	<i>2030:152 (must pass with C- or better)</i>
2420:104	Introduction to Business in Global Environment			3	
<b>2440:121</b>	<b>Introduction to Logic/Programming (Note a)</b>			<b>3</b>	<b>2440:105 or Placement Test</b>
<b>2440:140</b>	<b>Internet Tools (Note a)</b>			<b>3</b>	<b>2440:105 or Placement Test</b>
<b>Total</b>				<b>16</b>	
1 <sup>st</sup> Year		Spring Semester		Credit Hours	Prerequisites
2020:222	<i>Technical Report Writing</i>			3	<i>2020:121 or equivalent</i>
2420:103	Essentials of Management Technology			3	
<b>2440:145</b>	<b>Introduction to Unix/Linux (Note a)</b>			<b>3</b>	<b>2440:105 or Placement Test</b>
<b>2440:170</b>	<b>Visual Basic (Note a &amp; d)</b>			<b>3</b>	<b>2440:121</b>
<b>2440:180</b>	<b>Intro to Database Management (Note a &amp; d)</b>			<b>3</b>	<b>2440:121</b>
<b>Total</b>				<b>15</b>	
2 <sup>nd</sup> Year		Fall Semester		Credit Hours	Prerequisites
2420:263	<i>Professional Communications and Presentations</i>			3	<i>2020:121 or Permission</i>
7600:105	<i>-OR- Effective Oral Communication</i>				
7600:106	<i>-OR- Introduction to Public Speaking</i>				
2420:211	Basic Accounting I			3	
<b>2440:210</b>	<b>Client/Server Programming (Note a &amp; c)</b>			<b>3</b>	<b>2440:180</b>
<b>2440:241</b>	<b>Systems Analysis &amp; Design (Note a &amp; c)</b>			<b>3</b>	<b>2440:160/170/256 and 2440:180</b>
<b>2440:256</b>	<b>C++ Programming (Note a &amp; c)</b>			<b>3</b>	<b>2440:121</b>
<b>Total</b>				<b>15</b>	
2 <sup>nd</sup> Year		Spring Semester		Credit Hours	Prerequisites
2040:247	<i>Survey of Basic Economics</i>			3	
2420:202	Elements of Human Resource Management			3	2420:103 or Permission
2420:212	Basic Accounting II <i>-OR-</i>			3	2420:211
2420:243	Survey of Finance				2420:170 and 2420:211 or Permission
<b>2440:160</b>	<b>JAVA Programming (Note a &amp; d)</b>			<b>3</b>	<b>2440:121</b>
<b>2440:240</b>	<b>CIS Internship (Note a &amp; d)</b>			<b>3</b>	<b>2440:241, or (2440:202 and 2440:247), or (2440:282 and 2440:247)</b>
<b>Total</b>				<b>15</b>	

3 <sup>rd</sup> Year	Fall Semester	Credit Hours	Prerequisites
2040:240	Human Relations	3	
3400:210 3400:221	Humanities in the Western Tradition I <b>-OR-</b> Humanities in the World Since 1300	4	32 credits & 2020:222 or 3300:112 or 3300:114 (or permission)
2030:154	Technical Mathematics IV	3	2030:153
2440:xxx	<b>CIS Elective (Note a)</b>	<b>3</b>	<b>See Adviser</b>
2440:360	<b>JAVA Programming II (Note a and c)</b>	<b>3</b>	<b>2440:160</b>
<b>Total</b>		<b>16</b>	

3 <sup>rd</sup> Year	Spring Semester	Credit Hours	Prerequisites
	Humanities Requirement	3	
	Natural Science Requirement	4	
2030:345	Technical Data Analysis	2	2030:154 (must pass with C- or better)
2440:306	<b>Ethics &amp; Law in IT (Note a and d)</b>	<b>3</b>	<b>Junior/Senior Standing</b>
2440:456	<b>C++ Programming II (Note a and d)</b>	<b>3</b>	<b>2440:256</b>
<b>Total</b>		<b>15</b>	

4 <sup>th</sup> Year	Fall Semester	Credit Hours	Prerequisites
	Humanities Requirement	3	
2040:254 2040:256 2040:257 2040:258	The Black Experience 1619-1877 <b>-OR-</b> Diversity in American Society <b>-OR-</b> The Black Experience 1877-1954 <b>-OR-</b> The Black Experience 1954-present	2	2020:121 or 3300:112 or equivalent 2020:121 or 3300:112 or equivalent 2020:121 or 3300:112 or equivalent 2020:121 or 3300:112 or equivalent
3450:208	Introduction to Discrete Mathematics	4	3450:145 or 3450:149 or Placement test or permission
2440:465	<b>Data Communications &amp; Networking (Note a &amp; c)</b>	<b>3</b>	<b>Junior/Senior Standing</b>
2440:470	<b>Database Management II (Note a &amp; c)</b>	<b>3</b>	<b>2440:180</b>
<b>Total</b>		<b>15</b>	

4 <sup>th</sup> Year	Spring Semester	Credit Hours	Prerequisites
	Physical Education/Wellness Requirement	1	
	Area Studies & Cultural Diversity Requirement	2	
	Natural Science Requirement	4	
2440:450	<b>Applied Data Mining (Note a and d)</b>	<b>3</b>	<b>2030:345</b>
2440:451	<b>CIS Senior Programming Projects (Note a &amp; d)</b>	<b>3</b>	<b>Senior Standing</b>
<b>Total</b>		<b>13</b>	
	<b>Total Credits for Degree</b>	<b>120</b>	

**POLICY ALERT: By the end of your first 48 credit hours attempted, you must have completed your REQUIRED General Education English, Math, and Communications (Speech) requirements**

**Must have a minimum cumulative GPA of a 2.0 to graduate with this degree**

**DEPARTMENT OF BUSINESS & INFORMATION TECHNOLOGY POLICY NOTES**

- Students must attain a "C" or better in each course in their CIS major area (2440).
- The Dept. 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**

- Traditionally Fall Only (See Program Contact)
- Traditionally Spring Only (See Program Contact)
- Prior to enrolling in classes for the B.S. degree you must contact an adviser in Polsky 301

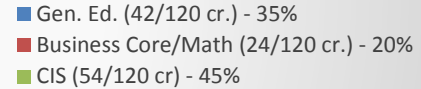
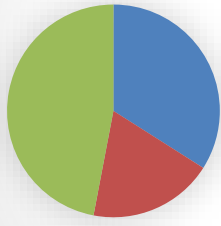
**CIS Electives:**

The CIS Elective may be chosen from the following list:

- 2440:321; Server-Side Scripting; (3 credits); (pre-req = 2440:121 & 2440:140),
- 2440:370; Visual Basic Programming II; (3 credits); (pre-req = 2440:170),
- 2440:388; Advanced UNIX/Linux; (3 credits); (pre-req = 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 (Total Credits)



### **PROGRAM CONTACT**

- Dr. Zarreen Farooqi ([zarreen@uakron.edu](mailto:zarreen@uakron.edu)), 330-972-8858
- Enoch Damson ([damson@uakron.edu](mailto:damson@uakron.edu)), 330-972-7162

### **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](http://www.bls.gov)) or visit the Career Center at Simmons Hall Room 301 (<http://www.uakron.edu/career>).

### **TRANSFER TO THE COLLEGE OF APPLIED SCIENCE & TECHNOLOGY**

Students can complete the transfer process through an appointment with an Academic Advisor, the Academic Advisement Center, Simmons Hall 205, 330-972-7430 or through an Academic Advisor in their respective Colleges.

(Hoge/Damson/Farooqi)